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Half-slave, half-free

One aspect of policy towards overseas students which was outside the scope of the book on this subject recently published by the Overseas Students Trust is its impact on the planning of higher education as a whole. The arguments for and against "full-cost" fees, or quotas, or any other regime for overseas students are well understood from the perspectives of aid and trade (and even the international mission of the arguments receive little emphasis on today's utilitarian world). However the influence of these various policies for overseas students on the rest of higher education has almost been ignored. This is strange because the original impetus to end the former laissez-faire policy was the need to make more efficient use of scarce resources for higher education at home. So it would indeed be a paradox if effective planning had been made more rather than less difficult by the various twists and turns of overseas students policy since the three years ago. Yet this is dangerously close to now being the case. The University Grants Committee, and to a lesser National Advisory Board, can no longer attempt to plan the whole of their sectors of higher education because in practice they only control the resources for home students. Some institutions, presumably perhaps the London School of Economics, receive up to half their income from the fees paid by overseas students. Most institutions have at least a few overseas students. As a result planning nearly always takes place at the margin, and as the income from overseas students is much more volatile than grants from the UGC or through the advanced further education pool, this income has a significance for institutional planning sometimes far in excess of its actual amount. What is happening is that universities, and to a much lesser extent polytechnics, are entering a crucial period of planning schizophrenia. A part of their income is provided by the highly volatile market in overseas students, while the rest is provided through an increasingly dirigiste mechanism operated by the UGC or in the future by the NAB. How these two modes of planning can be mixed at the institutional level appears hardly to have been considered. The result is that the UGC's selectivity policy, which is far more discriminatory than anything ever before attempted by the committee, may be substantially modified and even frustrated by the overseas students market, which like most markets cannot be safely predicted far ahead. No bad thing, the critics of the UGC will certainly reply. Yet if it is accepted that resources for higher education (and who is likely to question that?) are becoming increasingly scarce with the looming prospect of another general election and if it is also accepted that this requires a much tougher attitude to priorities than in the past, then some form of more effective national planning is surely needed. The UGC may be going wrong, or the UGC may be wrongly constituted to undertake this planning, but the urgent need for such planning is not reduced. Similar points can be made about the NAB. Universities and polytechnics now have to face the cruel combination of, on the one hand, the increasing centralization of home student's policy backed by much more detailed bureaucratic planning and, on the other, the absolute privatization of overseas students policy. Out of this there must somehow fashion a coherent and stable policy. Another conventional question about changing needs and aspirations. It appears to have little interest in urgent problems such as unified provision for 16-19-year-olds and skims over college links with adult and community education and the Manpower Services Commission. The minority report is on the right lines when it suggests local control of colleges. A system of management will not facilitate a unified post-school system for the young or encourage resource-sharing. But there are grave dangers in central funding. Local needs would be easily identified, but the Scottish Office might not meet them so readily. The Tertiary Council spent two years on this report. All they have done is to reinforce present divisions. In the words of the Scottish Institute of Adult Education, the report is an educational cart without a horse.

Scottish divisions

In the four months since the publication of the Scottish Tertiary Council's review of the structure and management of colleges, its proposals have been attacked by local authorities, directors of education, teaching unions, the Scottish Institute for Adult Education and the Scottish Trades Union Congress. It was inevitable that there would be opposition to any report produced by the council. It took on a formidable task when it was established by the last government, for the fragmentation of Scotland's tertiary sector ensured that it would be impossible to accommodate all the vested interests. Not even the tertiary council could agree on the future shape of post-school education: the majority report in effect proposes a split between advanced and non-advanced further education, with advanced FE centrally run and funded, and non-advanced FE centrally funded but locally run, while the minority report proposes that all colleges should be run by the regions, but with a 100 per cent central grant. Some of the report's critics seem predictable, given that the authors of the minority report were Mr John Pollock, general secretary of the Scottish Educational Institute of Scotland, and Mr David Semple, Lothian region's director of education. But the criticism is not merely sour grapes from losers. Mr Pollock and Mr Semple have been criticized for not going far enough. The one some order must be imposed on the complexity and confusion of the present system. The report does not do this. It has stuck to the letter of its remit, to consider the tertiary sector's structure and management, without giving consideration to educational questions about changing needs and aspirations. It appears to have little interest in urgent problems such as unified provision for 16-19-year-olds and skims over college links with adult and community education and the Manpower Services Commission. The minority report is on the right lines when it suggests local control of colleges. A system of management will not facilitate a unified post-school system for the young or encourage resource-sharing. But there are grave dangers in central funding. Local needs would be easily identified, but the Scottish Office might not meet them so readily. The Tertiary Council spent two years on this report. All they have done is to reinforce present divisions. In the words of the Scottish Institute of Adult Education, the report is an educational cart without a horse.

Entrails of honours

One view of honours lists is that they are a glimpse into the entrails of the establishment, a sign of who's up and who's down in the esteem of the Prime Minister and supporting mandarins. This is rather more difficult with the lists constructed by Mrs Thatcher since she became Prime Minister because in a significant sense the whole establishment has come down, having in her view so decisively failed Britain over a generation. In recent honours lists it suggests that Mrs Thatcher has in particular love for higher education, at any rate as an organized system. Scientists and scholars, of course, still receive their well deserved honours. After all the list cannot be made up exclusively of honours for "political and public service" and to forget private citizens and controversial chief constables. But those who could be called "office-holders" of higher education, Chancellor and Principals of the Committee of Directors of Polytechnics (even of the University Grants Committee), heads of institutions, and others who have the senseless task of making the best of the senseless cult imposed by Mrs Thatcher's Government, are clearly not in favour. The message from 10 Downing Street seems to be "could do better" or alternatively "more conspicuously that activities such as running a higher education system should not be encouraged and therefore must not be rewarded. Of course, honours do not really matter - except to those individuals who would be pleased to receive to be pleased as good a right our walks of national life, and except that their withholding is another symptom of how this Government rates higher education. It is news to no one that Mrs Thatcher and Sir Keith Joseph dislike universities, and polytechnics and colleges. It is however depressing to see their dislike confirmed in the entrails of the honours system.

Laurie Taylor



"Right. Next case. Could you please, secretary, give me a name?"
"Pauline Thompson, sir."
"Good. Now, this is, I see, a pretty marginal case. Spread of marks but average the 58-59 level. Boredom? Compassionate evidence in one? Yes, Dr Thingle, I understand you, I understand you, supervisor here, I understand you."
"Sir, Well, quite surprised that Pauline's case as she has. As some members of the department may know she actually cycling to the university on a bicycle in collision with a car. Waring and Gilroy, Dr Thingle? I'm trying to remember."
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# Tighter budget control sought

by David Jobbins

Local authorities, college principals and senior administrators are to defend the further education system against accusations of lax financial controls.

Serious reservations about suggested improvements in monitoring procedures are to be put to the Department of the Environment's audit inspectorate.

The inspectorate has proposed tighter budgetary controls which cut across a number of professional and industrial demarcation lines.

## Audit raises points of concern

by Ngain Crequer

The Comptroller and Auditor General's department has written a second letter to the University of Manchester Institute of Science and Technology, arising out of its recent audit.

The letter, which has not been released to UMIST council, raises nine points about defects in the university's audit system, and asks for comments.

A spokesman for the department said the letter did not concern the UMIST principal, Professor Robert Haszeldine. "They concerned systems defects, none of which he would con-

The local authorities are worried that the initiative is another example of a drift towards centralized control. They detect a change in the district auditors' role from the traditional one of checking that spending has been properly authorized and carried out to a more political one of making value judgments.

The Council of Local Education Authorities accepts that the report contains some worthwhile proposals but believes that others are based on misconceptions.

CLEA has called the meeting so that its reservations and those of the Association of Principals of Colleges, the Association of Colleges of Further and Higher Education, and the Association of College Registrars and Administrators can be put to the audit inspectorate.

The inspectorate is carrying out a similar exercise for the polytechnics, and the Committee of Directors of Polytechnics is to attend next week's meeting as an observer.

The chairman of ACRA, Mr Gerald Aldiss, said it would be wrong to measure efficiency solely in terms of registrations, exam success rates, failures and drop-outs. His association felt that the model register proposed in the report as a basis for financial control would not meet other equally important needs.

ACRA officers were this week meeting the inspectorate to discuss improvements.

The proposals have implications for teachers' conditions of service, and Naffie wants talks with DoE and local authority associations to outline its fears.

It is drawing up a response. A resolution calling for industrial action and non-cooperation was taken off the public agenda at this year's conference, but never reached in private session. Its supporters fear colleges may start to put some of the recommendations into effect without waiting for consultations.



Third-year student Matthew Browne poses with a self-portrait he painted in an exhibition of students' work at Camberwell College of Art which runs until tomorrow.

## Voluntary colleges bid to keep role

by Patricia Santinelli

A bid for a continuing strong role in higher education, including teacher education and training has come from the Association of Voluntary Colleges.

"We believe a flourishing voluntary college presence in higher education should be preserved," the association says in a statement about its nature and purpose. "Fundamental to this is the distinguished history of the colleges in, and their continuing commitment to, teacher training, currently amounting to 28 per cent of all such provision. We anticipate that this original purpose of the colleges will not be undermined."

The association's statement represents the views of all 28 voluntary colleges. It is concerned about its position in any reorganization of higher education being planned by the National Advisory Body, and about the recommendations of the Advisory Committee for the Supply and Education of Teachers.

The statement is issued, says the association, in the context of an extraordinarily confused and confusing situation. "In such a situation, it is not easy to anticipate the future role of institutions or to plan with insight."

The colleges argue that their contribution should be maintained because the voluntary principle should be upheld on the grounds of freedom of conscience and to preserve a diverse pattern of provision by institutions with an established record of public service.

## Glasgow may lose bequests

from Olga Wojtas

Scottish correspondent

A sociology professor is threatening to sue the Glasgow University trustees because of their decision to sell off the university's collection of social science books and documents to his former university, Glasgow, because of his decisions to sell other acquisitions.

Professor Donald Gunn MacRae of the London School of Economics said he knew of three other people "with collections of considerable scholarly value who are asking whether or not to leave their institutions in case they are sold."

Glasgow's court decided several weeks ago to sell a collection of negatives by the pioneer Scottish photographer, David Octavius Hill and Gordon's Birds of Australia, and the proceeds going to the library book fund, which has been cut by 10 per cent in two years.

The principal, Dr Alwyn Williams has stressed that neither was a bequest or added to collections already in the university. But Professor MacRae said that despite Dr Williams' "general assurance" he was deeply concerned that some important items had followed "Sir Keith Joseph's remarks that they should get through the crisis by selling their treasures."

To sell them would mean a substantial term and small gains, he said. "Glasgow has done something to make its very rich holdings available to the public, but it seems to me to be reversing this by looking on them as disposable resources. In law I can sell them, but academically it is not justified in doing so."

Universities said these things were not lost, but went into public collections, added Professor MacRae, but they also invariably went to Sir Keith Joseph's Birds of Australia, which was not known to be the only copy available in the Scottish Public, will almost certainly go to Australia.

Professor MacRae's personal library, covering the history of social subjects from 1700 to 1900, includes volumes such as a copy of the first book on class structure written in 1772 by John Millar, which was owned and annotated by David Stewart, Edinburgh's professor of moral philosophy and exponent of the "common sense" philosophy.

Professor MacRae has also collected documents and pamphlets on the early days of the Scottish Labour movement, including some items contained in any other British collection.

# Private funds aid expansion

by Olga Wojtas

Scottish correspondent

Universities are beginning to take advantage of recent encouragement to use private funds to expand their activities.

Aberdeen is the latest university to announce plans for sponsorship to enable new projects to start despite a crippling 25 per cent cut in grant. A development fund to be launched in the summer is hoped to establish two new chairs and expand its work in medicine, engineering, the oil industry and Scottish studies.

Dr Alastair Smith, who has been seconded from the geography department for five years as the trust's director, said projects had been chosen which were "thoroughly justifiable in academic terms and also relevant to the community at large".

A prospectus outlining the projects will be sent to local firms and industries and to Aberdeen's 20,000 graduates during the summer.

The university hopes to raise £3m, part of which will be used to set up an engineering chair, specializing in new offshore technology, and an ophthalmology unit, headed by a professor.

The university already has a centre for Scottish studies, but the trust would like to sponsor a section devoted to the language, literature and local history of north-east Scotland.

Aberdeen would also like to monitor the effect the oil industry has had on the social and economic development of the north-east, and would like to reconstruct the university's "cramped" anthropological museum.

Westfield College, University of London, is through its development trust launching its first major appeal for grants for research, a science extension, a new residence and a central student common room.

Newcastle University, whose development trust has raised more than £3.8m over a number of years, received £45,000 this week towards the establishment of a post in urology at the university's medical school. The money was donated by the Northern Counties Kidney Research Fund, bringing the total received from the fund to £270,000.

Sir Keith Joseph, Secretary of State for Education, has told universities that they should be raising a greater proportion of their funds from private sources. Last month the University Grants Committee announced that it would not penalize those institutions which attracted money from outside sources.

## 'No surrender' Dispute goes to ACAS

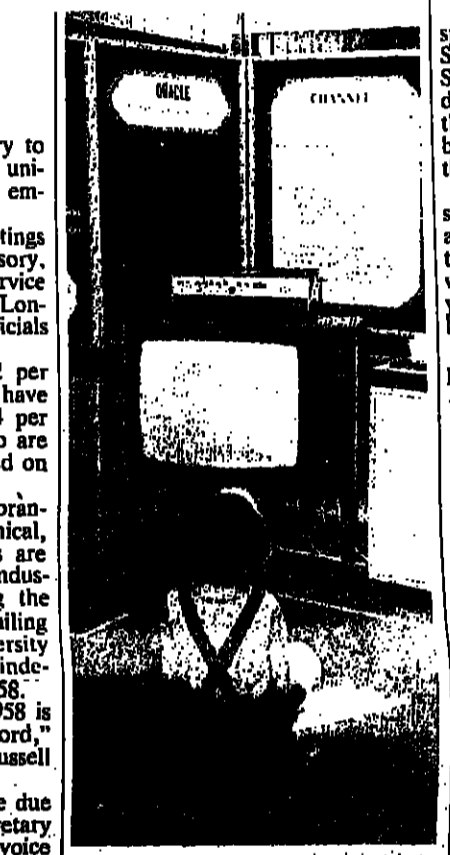
The chairman of the board of governors of Stranmillis College of Education in Belfast, Dr Stanley Worrall, has confirmed that discussions have taken place on a possible merger with nearby Queen's University.

But he has promised that there will be "no unconditional surrender." He told the annual Methodist conference that he had short interviews with the under secretary of state for education and the university vice-chancellor on the subject, but only as a matter of courtesy because it was to be raised at the meeting of the Stranmillis governors.

Dr Worrall, former headmaster of Methodist College, said the governors decided to reflect further on the matter and to defer decision until this month.

The chairman stressed that the governors would agree to a merger only with acceptable guarantees. "Seven investigations since 1958 in teachers acceptable to parents in the controlled (Protestant) schools' centre, the retention of religious training and the maintenance of the quality of teacher education."

He also complained that contentions of the board of governors "clearly justified by the fact that no final decision had been taken - had been breached and that there had been too much 'loud talking' apparently based on the notion that we intend to surrender."



A television eye to the future: A young visitor to Plymouth Polytechnic's information technology exhibition watches the marriage of the Prince of Wales on video.

# SSRC reviews referee selection

by Paul Flather

The system of choosing referees to judge applications from academics for research grants worth almost £5m in 1982-83 is being reviewed by the Social Science Research Council.

Professor Michael Wise, professor of geography at the London School of Economics, and a long standing SSRC council member is preparing a paper on referee selection as recommended by Lord Rothschild in his official review of the council.

The SSRC currently has a handful of reviews in train following recommendations in Lord Rothschild's report head office as it usually is the case, but in formal consultation with experts in Swindon, and at SSRC presentation of information.

The SSRC will send a full response to the Rothschild review to Sir Keith Joseph, the Secretary of State for Education, by July 19, the deadline set for public comment on the report. Formal responses have been reaching Sir Keith ever since the report was published last month.

But on the whole, social scientists, still agreeably surprised and cheerful at the report's main recommendations for the council to be retained without budget cuts for at least three years, have been muted in their public reaction.

A mood of near euphoria greeted publication and that has not fully put forward in a White Paper last year. But its foundations lie in alternative proposals put forward by the Manpower Services Commission task group, including the increased allowance which is to be set at £25 rather than the proposed £15.

The scheme is initially to provide for all 16-year-olds who are not in education but it is anticipated that a number of unemployed 17-year-olds will also be allowed to join, though no date has been set.

As a preliminary to the scheme, 100,000 high quality places which reflect the ethos of the new YTS, will be available under the Youth Opportunities Programme from this year.

The National Association of Teachers in Further and Higher Education welcomed the Government's decision to go ahead with the MSC's proposals on the youth training scheme this week.

subsidised. But while almost everyone believes Sir Keith has been left little room in which to "inflict damage" on the SSRC, they do not want to provoke him.

Even senior sociologists angry at the criticisms of their discipline in the report have been restrained. Professor A. H. Halsey, for example, professor of social studies at Oxford University, said the criticisms were gratuitous, but the whole report was a "noble effort" in so short a time, three months.

On refereeing, Lord Rothschild recommended referees should not be chosen, exclusively by the SSRC head office as it usually is the case, but in formal consultation with experts in the field through newly set up "machinery".

Lord Rothschild said: "Only those actively engaged in the field will know, for example, when some eminent scholar is just it, something which can occur at almost any age, which is read as implicit criticism of the current set-up."

He recommended relocation of the head office at Swindon should be examined as a matter of urgency because of the imminent rent review of the headquarters in Temple Avenue in the City. Savings could come in rent, London allowances in salaries, and sharing of some services with the two research councils already in Swindon.

## Training scheme to go ahead

The future of the controversial £1bn Youth Training Scheme was ensured this week after the Government dropped plans to make it compulsory and said it should go ahead in 1983.

Announcing approval for the scheme, Mr Norman Tebbit, Secretary of State for Employment, said that after pressure from employers and trade unions he had reluctantly decided not to withhold supplementary benefits from young people who refused to join the scheme.

"The scheme will however be reviewed after a year and young people will have their benefits reduced for six weeks as adults do who unreasonably refuse a suitable training place."

The scheme, which is to offer the first permanent education, training and work experience arrangements in the MSC's proposals on the youth training scheme this week.

## Grimsby-Hull merger to go ahead

The creation of a new Humberside College by merging part of Grimsby College of Technology with Hull College of Higher Education was given the go ahead this week.

The merger was approved by Humberside County Council's education committee and is expected to be ratified by the full council in July. The plan has already been agreed by the Labour Group on the council.

A working party composed of members of the education committee is being set up to look at the creation of the new institution, intended to open in September 1983. No figure has yet been set for the cost of the development.

The new institution would be similar to a small polytechnic covering a large part of the east coast with over 4,000 full time equivalent students on a wide range of advanced degree courses.

It would take in all Hull College's work and the advanced work in Grimsby which includes courses in food science and technology, together with Business Education Council, HND and courses in refrigeration and air conditioning involving some 350 full time equivalent students.

The merger plan was initiated by Mr John Stoddart, director of Hull College and Mr Frank Vivian, acting principal of Grimsby College, and came about because the two colleges' work is complementary rather than competitive.

Bedfordshire College of Higher Education is threatened with a £420,000 cut in its budget. If a package of proposals approved last week by the county council's policy and resources committee is ratified by the full council in July.

The college which would have to meet the reduction over two terms instead of a year would be forced to cut down the number of its part-time teachers as well as supply and services. It is hoped however that there will be no compulsory retirement and that teacher training courses will be maintained.

## Magee aims to expand

A ten-fold expansion in staff and activities, with modular degrees, off-campus teaching and new centres for Irish studies, Irish social policy and business studies, are proposed in a document drawn up by staff at the Institute of Continuing Education, Magee University College, in Londonderry.

The document states Magee's response to Government plans for the merger of its parent body, the New University of Ulster, with Ulster Polytechnic by 1984.

Despite pressure from NUU not to go public, Magee staff believe they should have not less than 25 per cent of staff in this new institution, and ensure that it was "a genuine three-campus federation, not a two-party body under a central council and senate."

They would also involve significant changes in current university and polytechnic habits: new forms of certificate and non-certificated courses, part-time study, available in most courses with a consequent increase in part-time students, evening and decentralized teaching in the province's FE colleges at all levels and a modular degree structure.

The new body should encourage FE colleges to teach its courses under the supervision of its staff. "We appreciate," the report says,

## Vote seals college link

Bedford College governors finally approved the merger with Royal Holloway College, London this week. The first joint intake in chemistry and life sciences, will start in October.

It was the second time the governors had voted on the constitutional change necessary to make the merger effective. The vote was 80-20, clearly providing the necessary three quarters majority.

Earlier a joint facilities meeting at Bedford had voted by 61 to 17, with four abstentions, in favour of the merger. Although some Bedford staff are still bitterly opposed to the move of the Bedford College to the RHC Egham site, their numbers are dwindling, and options few.

## Lecturers could teach

continued from front page

But this week Mr Ian Morgan, the NUT executive member responsible for teacher training matters, said: "Nobody has consulted us since 1974. I believe that we would welcome the giving of qualified teacher status to FE staff provided that we were sure that standards of entry into the profession were acceptable."

The Department of Education and Science says that the changes proposed would apply not only to further education lecturers but to all state-qualified teachers. It says that every student-qualified teacher should state quite clearly that he could teach in a particular subject thereby enabling further education lecturers with competence in a specific area to teach in schools.

Proposals on the subject put forward by the FE sub-committee of ACSET are currently being redrafted and are due to be put to the main committee in July.

They include the introduction of a BEI course of initial training at the four colleges which train most of the country's qualified FE staff. Only about 40 per cent of lecturers at present have a qualification, and in most cases it is a teaching certificate gained in service.

Since the DES has fended off the establishment of initial degree courses mandatory for teacher training to FE staff because it is not an obligatory requirement of colleges, the Treasury argued that FE lecturers have already exhausted their ordinary grant entitlement in obtaining their technical qualifications or first degrees. (TES)

## International Specialist Courses

These courses provide opportunities for senior education specialists to learn about recent developments and to participate in high level discussion with colleagues from other countries.

Microcomputers in Schools	(Dr Bill Tagg)	18 - 30 July 1982	Theydon Bois	£500 (non-residential £300)
Communication - Towards the 21st Century	(Thomas Singleton)	5 - 16 September 1982	Brighton	£545 (non-residential £325)
Designing Secondary Mathematics Curricula: Responding to Changing Needs	(Geoffrey Wain)	5 - 17 September 1982	Leeds	£475 (non-residential £275)
The Role of Library and Information Services in National Development	(Russell Bowden)	5 - 17 September 1982	London/Oxford	£525 (non-residential £305)
Drama in Education	(Mrs Dorothy Heathcote)	5 - 17 September 1982	Newcastle upon Tyne	£435 (non-residential £252)
University Administration	(Hugh Livingstone)	28 September - 8 October 1982	Glasgow/Rothsay	£590 (non-residential £343)
Planning the Education of Adults	(Professor Paul Fordham)	31 October - 12 November 1982	Southampton	£565 (non-residential £320)
18 - 19: The Education and Training of Young People	(D J Moore)	5 - 15 December 1982	Southport	£485 (non-residential £285)
Curriculum Evaluation - an International Seminar	(Professor Malcolm Skilbeck)	16 - 28 January 1983	London	£455 (non-residential £265)
Art in Education	(Eleanor Hipwell)	6 - 18 March 1983	Leicester/Birmingham/Devon	£595 (non-residential £345)

Names of Directors of Studies are shown in brackets. Residential fees include accommodation (and meals as stated in the course prospectus). A limited number of non-residential places are available for one-centre courses. Prospectuses and application forms are obtainable from British Council Representatives or from the Director, Courses Department, The British Council, 85 Davies Street, London W1Y 2AA.



News in brief

'Back NHS strike' call to staff

Thousands of university and college staff were being asked to back this week's one-day strike by National Health Service workers.

TEC-BEC union

The Scottish Technical Education Council (SCOTTEC) and Scottish Business Education Council (STIBEC) have unanimously agreed to merge.

Capital rises

College lecturers in the capital are to be paid improved London allowances without having to wait for formal ratification by the Burnham further education committee.

Advice unit

Strathclyde University has set up a new economic research unit specialising in the Middle East and North Africa.

Cancer cure prize

Dr Denis Burkitt, honorary research fellow at St Thomas's Hospital in London, was last week awarded a \$100,000 prize by the General Motors Cancer Research Foundation in Washington.

Government gift

Sir Keith Joseph, Secretary of State for Education, last week announced a Government donation of £25,000 to the Edward Boyle Memorial Trust.

Science link

British and Dutch research organizations agreed to extend the scientific collaboration begun between them last year when they formed an astronomy partnership.

Review of student doctors due soon

by Karen Gold

The first in a series of reviews of medical school intakes and likely demand for doctors is about to start.

The review is part of consideration of changes in medical training recommended by the House of Commons Select Committee on Health.

Mr Clarke replied: "I ask people who call for an immediate cut in the intake of medical schools to bear three points in mind."

Medics face new threat

The Royal Postgraduate Medical School, already in deficit, this week simultaneously announced a possible 70 redundancies and the fact that it will be £600,000 in the red next year.

Merger may mean limited tenure

Restricted tenure for new staff is being considered by a working group planning the merger of University College, Cardiff, and the University of Wales Institute of Science and Technology.

Hall closures may force an end to studies

There are fears that 300 students could be forced to give up their courses because there is no alternative accommodation for them if their halls of residence close.

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Anger at lack of teaching in Welsh

by David Jobbins

Welsh-speaking students are growing impatient at the slowness of recognition given to teaching in their language in the principality's university and colleges.

Latest signs are: The nomination of an activist for possession of explosives to the court of the University of Wales.

Mr Jenkins, who took an Open University degree while in jail, is now taking a two year social work qualification.

Treat overseas students fairly, lecturers demand

by David Jobbins

Overseas students should be charged the same fees as UK students, the college lecturers' union says this week in a criticism of the Overseas Students Trust report.

But a rival union called on local authorities to reduce public sector fees at least to the level of the universities to help counter a fall in overseas student numbers and save teaching jobs.

Russian is saved

The University Grants Committee has withdrawn its recommendation that Russian studies at Heriot-Watt should be axed, and has increased the university's arts student intake by 30.

Pests centre goes solo

Pesticide research at the Cranfield College of Aeronautics is to go independent next month, with the transfer of staff and resources currently provided by the international firm Ciba-Geigy to a new International Centre for the Application of Pesticides.

Racism in colleges should be fought

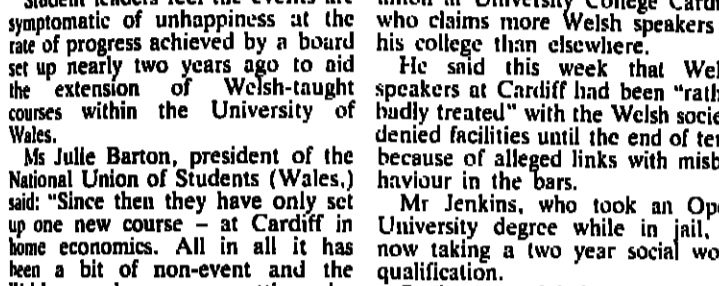
The Inner London Education Authority education officer is to inquire into the means by which racial discrimination could be counteracted in London's colleges of higher and further education.

Library schools face technology challenge

by Felicity Jones

Departments of library and information studies need to direct their curricula more directly towards the challenge of information handling in an age of information technology.

Spots on the wings of the Meadow Brown butterfly



Spots on the wings of the Meadow Brown butterfly (Maniola jurtina) are different in Cornwall from their pattern throughout the rest of Western Europe.

£3m grants for tropical medicine

by Ngaio Crequer

The Wolfson Foundation has given grants totalling £3 million to the London School of Hygiene and Tropical Medicine and Liverpool School of Tropical Medicine.

No takers for leisurely study

A four-year old research programme on people's ideas on leisure from playing football to "hanging around street corners" has so far failed to attract academics from a full range of disciplines as first hoped.

It's time women were given a real opportunity for equality, says the MSC

Women should be given greater opportunities for scientific/technical education and further professional training if they are to overcome career obstacles not faced by men.

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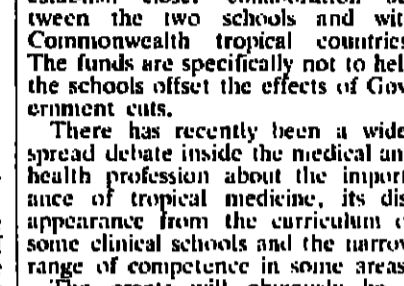
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North American news

Harvard raises campaign target

Harvard University is to increase the target it set itself three years ago for one of the biggest fund-raising ventures ever launched by a private university.

Plagiarism case student appeals

Miss Gabrielle Napolitano, the Princeton student penalized for plagiarism in an essay, is to appeal against a New Jersey court decision upholding the university's action.

Engineering exodus slows

The shortage of engineering lecturers in American universities is showing signs of a small decline, according to a survey by the American Association of Engineering Societies.

Contracting out

A British architect, Mr James Strling, has been chosen by Cornell University in New York State to design a \$16m performing arts centre at the campus in Ithaca.

Researchers pressed to reveal interests

WASHINGTON The federal government was asked last week to require university researchers who receive government funds to reveal their personal financial interests in firms which could benefit from the research results.

increased rapidly in the past year and now stood at more than \$200m. He said he had convened the hearings because of concern that universities may be permanently altered by the increasing number of commercial agreements they were developing.

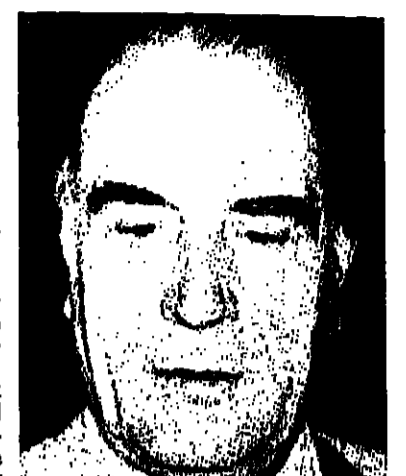
The American Association of Universities, which represented the major research universities, was expected to produce a major report on the issue in the autumn. Meanwhile a group of leading university presidents had met representatives of the biotechnology industry at a summit in California last March.

These were that openness was preferable to secrecy; the education of students took precedence over commercial commitments; university lecturers should remain "credible and impartial"; resources in national debate; the choice of research topics should be made by the researcher; the "primary obligations" of academics must be to their teaching and research.

Overseas news

Change in status for untenured

PARIS Untenured teaching staff in French higher education will soon benefit from wide-ranging changes in their conditions of service following the publication of the ministerial decree.



M. Mitterrand: behind reforms

City dwellers beat country cousins in battle for places

HELSINKI Higher education policy in Finland has failed in its aim to promote regional equality, according to two researchers in the department of pedagogical science Jyväskylä University.

Private college hits snags

BONN Opposition from education authorities is jeopardizing the future of West Germany's first private university, based at Herdecke in North Rhine-Westphalia.

Universities attract mixed bag

MELBOURNE A national survey of first year university students in Australia has shown marked differences in their backgrounds, experiences, outlooks and levels of satisfaction with university life.

Adriatic pact

The Austrian University of Klagenfurt and the Italian University of Udine have concluded a partnership agreement which may lead eventually to a regional federation.

Double blow may force many students to give up

WELLINGTON New Zealand's student holiday work programme has been scrapped after three years of providing vacation employment for up to 12,000 tertiary students.

Dewar describes the move as "the death knell for the quality of teaching in New Zealand" and the primary teachers' union, the New Zealand Education Institute, suggested that trainees who could afford to train and could get the same money if they went straight to university were more likely to opt for this.

Engineering colleges 'need reforms'

PEKING China's engineering colleges need reforming to give more emphasis to applied science and to provide more broadly based courses. They can learn this from foreign experience, according to an academic writing in the official People's Daily newspaper.

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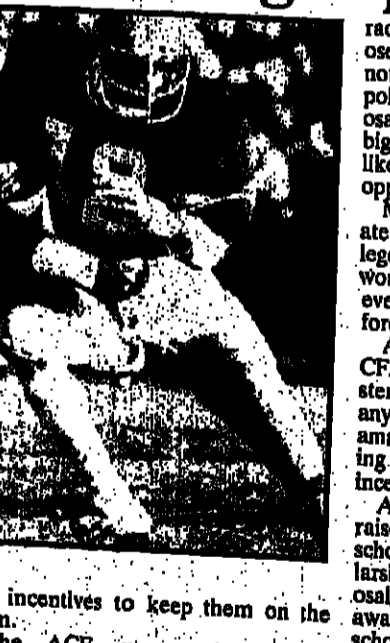
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Cash scandal in college sports

Far-reaching changes in America's multi-million dollar intercollegiate athletics system are being considered by university leaders.



radical of the many schemes proposed to reform college sports. It has not yet been adopted as a formal policy of the association and its proposal to end the amateur status of big-time football and basketball is likely to encounter formidable opposition.

Klan contact causes protests

Student representatives at the University of Oklahoma are protesting to the regents at the decision to retain the name of the chemistry building on the university campus at Debarb Hall.

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Peter David, North American Editor, The Times Higher Education Supplement, National Press Building, Room 241, Washington, DC 20045, Telephone: (202) 638 5765



# Religious knowledge

Flying saucer sightings, acolytes in orange robes, holy secrets of the great Egyptian pyramid — all of these are being drawn to a somewhat unlikely destination: a computer in the grey concrete confines of King's College London.

The computer has not yet arrived; nor has its funding. But it is the goal of the Centre for New Religious Movements in King's department of theology and religious studies, recently established with a one-year grant of £5,000 from an educational trust.

Meanwhile the centre's growing store of information on post-war religious movements in Britain sits on shelves and in filing cabinets, waiting for the arrival of at least 10 collections promised by organizations and individuals from all over the country. Birmingham Central Library, Leeds and Stirling universities, ex-members of religious movements, parents, and some of the groups themselves all contacted King's lecturer Peter Clarke when the centre's opening was publicized six weeks ago.

Altogether he received more than 100 letters. Some were collections amassed over years — the field has become a rich one for study, with around 40 others were short accounts of personal experiences, usually from parents, some asking for help or advice.

One mother has offered the daily diary kept by her ex-Moonie son throughout his stay with the Unification Church. A girl belonging to another group rang up from the Midlands, offering to tell Mr Clarke of her experiences provided her name and whereabouts were kept secret for fear that she would be traced by the movement.

"People just get on the telephone and say, 'Have you heard about these people?' Mr Clarke said.

Often he hasn't. Currently the centre has 58 movements listed. No one, according to Mr Clarke, has any idea how many there might be. By next April when the grant expires, he hopes to have found out how many there are, classified them and produced information about some of them.

Both he and the head of department...

**Karen Gold reports on a London centre for the study of new religions**

ment. Professor Stewart Sutherland, who instigated the centre have more long-term hopes for it. Professor Sutherland sees it initially as a three-year project. If established by then, there could be publications, books, even a quarterly journal.

A conference is planned for the end of the year, and eventually post-graduate students may be attracted to the centre's resources to use for their research.

But the centre is not only for academic work. More general inquiries from the media, community relations groups and schools will be encouraged too. Already Mr Clarke has been asked for information on an unknown group wanting to buy land from a local authority.

Legal disputes such as those between husband and wife, one of whom has adopted a new religion, could also be clarified by facts about the religion itself. Above all, parents of children who join new movements will have a source of information they have never had before.

Information, and not counter-information, Mr Clarke stresses. The centre has no association with groups such as Deo Gloria, set up specifically to counter what some call cults — a term he and Professor Sutherland ban from their vocabulary.

Instead it plans to draw up "fact sheets" — straightforward information about each movement, drawn from a number of sources including the movement's own. They would be non-controversial," says Professor Sutherland.

"If for example," added Mr Clarke, "a group say they are interested in the Third World, but in all objectivity it seems that they are more interested in stocks and shares in the First World, then what's the true picture?"

Bringing ordinary people in a

potentially emotional situation, into a university department seems an unusual if not explosive mix. In addition, the centre is likely to be drawn into controversy by the very nature of its subject matter. Mr Clarke insists that academic objectivity can and must be sustained.

"One area where we might be useful is the discussion about whether Rastafarianism is a religion. And do you treat Rastafarians differently if it is or is not a religion?"

"Say a Rastafarian was in prison and said that because of his religion he couldn't eat certain things. The prison official says it isn't a religion. How are you going to decide? We might be asked what we think of them, and we could be of use."

"It's not sitting in judgement, it's a professional opinion. What we would say is that there are many different definitions of religion."

"Some Rastas have certain tenets and rituals that could be classified as part of a millenarian movement, and most millenarian movements could be classified as religions. On the other hand, there are Rastafarian groups which are very political. It would depend on which group was involved."

"We could clarify the position and open up a discussion of certain possibilities with people. But at the end of the day it's up to people to decide what to do with the data they get."

Classification of the various movements is another task for this year. Like drawing up a bibliography — also Mr Clarke's intention — it involves diverse and often hard-to-find information: tracing sects of established religions such as Christianity and Islam, as well as unusual mystical, prophetic, esoteric and meditative groups, and "secular" religions, with no supernatural element but rituals and beliefs creating a quasi-religious system.

Quises produced in America show a large rise in new groups: 108 new ones from 1940-1950; 207 from 1950-1960; 273 from 1960-1970. In Japan and Southern Africa in particular, according to Mr Clarke, the increase has been extraordinary.

No one knows their extent here, although they are likely to be fewer. "Study of these movements in Brit-



Rasta with ganja: how to decide if Rastafarianism is a religion?

ain could tell us an awful lot about our own society.

"For example, immediately after the war it was the Labour Party which presented people with idealism. Now people are less likely to find their idealism in political parties, and they might join these movements instead."

"Then there are young Indians and Africans who re-culturalize themselves through religious groups; they rediscover their roots. That might prompt us to ask about the school curriculum we have: should it be much more multi-cultural?"

# Two views on the need for more academic interest in policing and how to encourage it

## Police studies: the discipline of the future?

### Charting a new path through the law and order debate

**Paul Flather talks to John Alderson, former Chief Constable of Devon and Cornwall, about his new life as an academic**

One year after the Brixton and Toxteth riots the debate about policing is still current. All the same it is incongruous to hear a senior police officer talk freely about knowledge as power, about the problem of balancing freedom against social control, and about community democracy versus law and order.

But then John Alderson is not ordinary — he is more the thinking person's policeman. He has just changed his chief constable's uniform for the more casual dress of a university don; the rural climes of Devon and Cornwall where, since 1973, he has been chief constable for the academic groves of a Cambridge college; the pursuit of offenders for the pursuit of knowledge.

Alderson, an immensely friendly, unassuming, and disarmingly enthusiastic man, currently has rooms in Corpus Christi where he is a one-term visiting fellow commoner, giving lectures at the college and the Cambridge Institute of Criminology. He is, of course, known as the leading promoter of community policing against more authoritarian alternatives.

When we met he was "recovering" from the college feast the night before when he had worn the gown he got when receiving an honorary degree from Exeter University. Appropriately he had been seated opposite Lord Scarman, who apparently still hopes for a full Government response to his report on the riots. (One college fellow joked: "The two rods were put together.")

He was working on an article for a wholesale distributors' magazine for the Queen's peace. He sees the job of communicating issues of policing to all groups as an important task. Indeed he could line out every other night on invitations to talk to clubs and societies — and frequently does. "The Queen's peace is a fragile thing," he writes.

Alderson says he finds Cambridge

life (the "dolce vita") difficult. "You have to arrive on time and go through it all properly," but he is immensely grateful for the chance to be in contact with intellectual minds. "It's hard work talking for three hours on one subject." But he seems to have fallen into the way of things, offering sherry to visitors, greeting faces in the quad, at ease among the bustle of the hall. Only when the coffee-machine in the Senior Common Room stubbornly refuses to do its job is he ruffled. We repair to a suitably named coffee shop, the Copper Kettle.

He is at Cambridge to pursue his ideas and to stimulate more academics to write about police. It is also a pleasant way of retiring from the force. He is 60 and leaves five years early. His first target is a textbook on human rights and the police for the European Commission on Human Rights for whom he is a consultant. His main project is a readable review of the science of policing over the last four years, analysing particularly the strains in the traditional model of policing.

He has just been given a one-year fellowship at Nuffield College, Oxford by some wise dons who want to ensure he has time to complete the work. "I'll be able to talk with all those clever social scientists," Alderson says.

He believes the Anglo-Saxon ideal of policing by local consent has gone, and there have been some pretty irreversible changes since Sir Robert Peel's day when the Met kept the Queen's peace in a pedestrian and more authoritarian society. In a motorised, anonymous society, the man on the beat cannot just be a patrolman. New theories are needed but he does not accept the drift towards a paramilitary force.

As he put it to the Scarman Inquiry last year: "... If we are to save ourselves from incessant conflict we must start talking hearts and minds, not CS gas and plastic bullets." Always ready for controversy, Alderson threw away all customary caution of a policeman in public, saying of the Brixton policing: "150 years of British police heritage went down the drain. Anyone who witnessed the riots at first hand can understand."

In his 1981 (and final) annual report he pursued the same theme: "If the police, either universally or locally,



Alderson: from the beat to the quad

come to feel alienated it is likely the fundamental nature of the functioning will change from an essentially proactive to a reactive force... the Rubicon will have been crossed."

His thesis will chart a new path through the law and order debate, avoiding countless theories of deviance and none of protection, as well as the authoritarianism favoured by his main theoretical rival in police theory, James Anderson, Chief Constable in Manchester, just given an official seal of approval with a Birthday Honour. "Balancing social control and freedom, that is the future question. That is where the academic institutions need to work more

quickly and well to produce policies fitted to our time."

Alderson was brought up in Barnstaple, joined the police in 1946 after the war. He taught himself law while he was an inspector, was called to the Bar, and spent a year as a fellow in Australia where he learned "it was not so bad a thing to challenge authority". He rose through the ranks to become deputy Chief Constable of Dorset by 1964. He became Commandant of the Police Staff College at Bramshill, worked his way up the Met and was a serious candidate for the prize of Commissioner. Another reformer after Sir Robert Mark, it was argued, would be too much, and he was persuaded to take the top job in the West Country where he pioneered community policing.

He explains community policing with the analogy of a tree: the roots are the community policing, the trunk like a scarecrow is the deterrent work, reaching out. He had been labelled the "wet" policeman, but he is not soft. His strength in academic terms must be his practical experience in the need to keep the peace as well as allow individuals rights. In that sense he could be a vital pioneer.

His mission in a sense is to provoke academic interest in police studies, and already Strathclyde University has taken the bait, and the London School of Economics is showing interest, in developing centres of research. As he puts it Royal Commissions and inquiries (the latest is Scarman) occur when there are crises. But there is a serious lack of substantial literature on the subject. Most other established professions such as law or education or medicine do not share this problem, nor do other major institutions such as courts, parliament, or ministries.

The Americans have gone much further, although not all the literature is so good, he adds. Berkeley teaches police science, Michigan has a police sciences professor, he says, while French police graduates get full training at the Ecole de Supérieure at Lyons. In Britain of course there is a dearth of police graduates, with surveys showing few even consider the option, although this is changing as jobs elsewhere shrink.

Alderson quotes two heavyweight books on policing: Thomas Critchley's *History of the Police in England and Wales* (Constable, 1978) and Charles Reith's *British Police and Democratic Ideal* (OUP, 1943). Next would probably come his own book, *Policing Freedom* (Macdonald and Evans, 1979) in which he warned: "If democratic police are unable to adapt to the changing world they will disappear like the dinosaur and their

place will be taken by a much less attractive method of policing." That was three years ago, remember.

Echoes of that same debate appeared in his other book, edited jointly with J. P. Stead, *The Police We Deserve* (Wolfe, 1973). Of course the area is beginning to blossom because of the critical position policing finds itself in: recently Ben Whittaker has written *Police in Society* (Eyre Methuen). But in general, he says, the intellectual curiosity of academics has bypassed the police, a view confirmed by a librarian at the Police Staff College. There is no shortage of essays and articles, Alderson says, but serious political scientists and economists have not attacked the subject. (The Social Science Research Council please note.)

As his statements to Scarman show, Alderson attracts controversy. His most celebrated public "row" was probably the Luxitlan case when he was taken to court by the Central Electricity Generating Board for refusing to evict anti-nuclear protesters from a field where the CEBG wanted to drill to set up a nuclear plant. Without a breach of peace Alderson did not want to use force. Great constitutional principles were at stake. In the event flogged, and after the case Alderson simply spoke to the protesters and asked them to leave, which they did. Perhaps community policing cannot work in urban centres. But how many forces follow Devon and Cornwall attaching constables to schools to help parents and teachers head off misconduct before it is too late and in the courts? Officers and young people learn from each other.

Alderson is tipped as a future Liberal MP. He was surprisingly candid about his political future, describing himself as a radical Liberal, he said, but had really just been following his star. But he was probably too old to start another career. He agreed his academic work would probably benefit if he remained out of party politics. But he was paraded by the Liberals in the recent Beaconsfield by-election.

Alderson has always been a bit of a thinker. His hobbies in *Who's Who* are: reading, writing, swimming and walking. Indeed he may have thought himself out of a job. He admits it was difficult to talk freely about the science of policing inside the force: "Philosophical or abstract subjects were taboo in the canteen." Such talk earns disapproval from peers and superiors. Out of uniform he is free to pursue those ideas and to talk freely. Scarman is reported to have said Alderson was the only one to put a coherent theory of policing in front of him. One way or another Alderson should provoke more.

## Patricia Santinelli looks at the fate of Britain's smaller, voluntary higher education institutions

### Tactics for survival

St Mary's College's fall from grace announced last week is being blamed partly on low recruitment and the Government's new funding scheme for the voluntary colleges to be introduced in 1983.

In fact St Mary's demise due in 1985 may be the first step into another round of closures, striking initially at smaller institutions. A development which both the Department of Education and Science, and the Advisory Committee for the Supply and Education of Teachers shy away from admitting openly.

Undoubtedly voluntary colleges and in particular the smaller institutions face a harsh battle for survival especially in the year 1983/84. Voluntary colleges are confronting a series of changes which few other institutions have had to contemplate in one package.

One of these is the new funding approach, described by some as a Machiavellian attempt to set Peter to rob Paul. It is radical in that the colleges' grants will no longer be based on staff-student estimates. Instead they will be for total income available for the whole sector and on this basis submit three financial estimates, one basic and two supplementary.

This allows flexibility within the system but means that those colleges which bid successfully for a 2 or 4 per cent supplement will be denying others resources even scarcer under the new funding approach.

An even greater concern for the

colleges at the moment is that the DES has not been able to soften the impact caused by changing the institutions' financial year from an academic to a fiscal one. The colleges have to adapt to this in a short period and face running out of funds in the middle of an academic year, or not having spent an allocation by March 31 and being unable to claw it back.

A further complication is that the colleges have moved away from factors combined with Acset's recommendations could mean several deaths.

Between the announcement of the new system and its implementation in 1983/84, the colleges will have already experienced at least a 7 per cent cut and will have to accommodate a further 2 per cent reduction to provide the element of flexibility. By then their total budget will be around £54m.

The question which confront colleges is how to survive in such a hostile climate.

St Martin's College, Lancaster is a good example of an institution which might ride the storm, mainly because of the way it has sought to raise its income by attracting a number of external innovative projects, some of which are fast gaining a national reputation.

The philosophy of Dr Robert Clayton, the Anglican college's principal, has played a large part in this. He points out that the college specializes in initial and in-service teacher training and it follows that one of its preoccupations is its "power house" activity.

"By this I mean the work of staff and teachers in the field of curriculum review and development and appropriate research funded by institutions or outside bodies such as the Schools Council, the EEC, and

the Manpower Services Commission," he says.

This does not mean however that the college will not face some contraction in the next few years.

Mr Paul Winter, the college's bursar and the chairman of the Bursars Association of Voluntary Colleges have said 1983/84 is going to bite very hard on staffing, a prospect for all the colleges.

Mr Winter says this will not mean the closure of departments at St Martin's as it might do in some other colleges. This is because their planned strategy is to seek voluntary redundancies and not fill posts which fall vacant.

"But largely it is going to be achieved through natural wastage in non-teaching posts and the bulk of reductions will be cuts in non-staffing areas."

He warns however that similar cuts beyond 1983/84 could only be achieved by cutting programmes.

Moreover, the 600-student college which has diversified into BA and MA courses but whose main work is in running BEC and Postgraduate Certificate of Education courses will undoubtedly be affected by Acset's recommendations.

The college introduced a new BEC in 1980 which was recently pegged at an intake of 78. Either through luck or foresight this is in line with recent DES documents and methods of teaching courses.

But although its primary intake is safe its secondary intake is threatened. In its secondary BEC only religious studies is on the list of safeguarded areas and this is causing concern in the institution.

Only last week the National Association of Youth Workers met with the Inspectorate at the college to discuss the threat to youth and community studies, which is run as an

option to a main subject and is only taught in six other institutions.

The limitation of the secondary BEC to so few subjects will also call into question other provision such as modern languages whose unique aspects have impressed the inspectorate.

For example in French, students are assessed at the end of their third and fourth years by having to give a lecture in the language based on a substantial article. Once this is delivered, students are questioned to see how well they cope under the strain as the department believes this simulates conditions they will meet in the classroom.

The department of modern languages points out that BEC students perform as well if not better than PGCE students, who often do not cope as well in the classroom.

It believes that the loss of the secondary BEC nationally in modern languages leaving only PGCE students will result in a drop in standards, especially because postgraduate courses do not allow sufficient teaching practice.

Moreover it is possible that the college will experience a cutback in its PGCE intake as well.

However the principal is hopeful that since the division of the 20 per cent proposed cut between the university and public sector has not yet been decided, his institution because of its viable groups, might be chosen as a centre of excellence in certain subjects.

He is critical however of the way institutions are continually being asked to respond not only to the cuts but to recommendations for improvement in the content of their courses.

He argues that HMI should adopt a more supportive role and attempt to bring institutions together both to discuss changes and to devise a strategy

on how these can be implemented.

However neither Dr Clayton nor David Peacock, director of the institution are going to be cast to terms, their policy is to externalize terminal projects and try to obtain outside funds.

The establishment of the Institute of European Education at the college is an outstanding example of a strategy. It was set up through an EEC grant but now because of its success in revolutionizing language learning in the north it almost supports itself. New York local education authority support is well over £30,000.

A basic tenet of the institute which has existed for four years, is that a knowledge of Europe and its culture is introduced into the curriculum through primary, secondary, further and higher education.

David Peacock, director of the institute, says this cannot really be achieved without sorting out modern languages.

In fact, Mr Peacock has already begun to achieve this by graded tests to assess the level of language proficiency sufficient for a holiday. Successful candidates are awarded a proficiency certificate.

From a small start with 20 students the institute is now operating graded tests in some 200 and taking 43,000 candidates were taking tests in French, German and Spanish. The draft for an Italian test is almost ready.

David Peacock says that as a result of the numbers in the fourth and fifth years of school opting for modern languages has risen from 35 to 65 per cent.

David Peacock says he would like to see Martin's to become known for its European dimension in all its teaching and research. This he believes would help student teachers to become more aware of the teaching systems in other countries.



# Provincials and professionals

## A. H. Halsey traces the careers of the LSE sociologists of the 1950s their backgrounds, their aspirations and their rise to eminence



A continental visitor to the social sciences in Britain after the war would have noticed the secure establishment of economics in Cambridge and politics in Oxford. These subjects also enjoyed a sturdy, if modest, existence in such other universities as Manchester and Glasgow. And there was the distinctive London School of Economics and Political Science where the visitor's eye might have been caught by about a dozen students of sociology similar in age but of a style and outlook markedly contrasted with that of their Oxford contemporaries. They took their degrees, and based themselves around Houghton Street with a novel aspiration.

They wanted to become professional sociologists. I was one of them. Fifteen years later Raymond Aron was visiting Oxford and some of us were gossiping about the state of the British sociological art. Aron suddenly cut in to explain: "The trouble is that British sociology is essentially an attempt to make intellectual sense of the political problems of the Labour Party". Fifteen more years later, Ernest Gellner suggested that I chronicle what turned out to be the first group of career sociologists in Britain. What had been their political and intellectual concerns? What formed their unprecedented and unlikely occupational ambition? And what happened to them and their intentions?

I promised to write the essay knowing that the reference was to those who graduated (mostly) in sociology at "The School" in the early 1950s, together with one or two, notably Ralf Dahrendorf, who came from elsewhere to join them as graduate students.

To be more precise by enumeration, the group consisted of J. A. and Olive Banks, now both of the University of Leicester, Michael Banton, now of the University of Bristol; Basil Bernstein, now of the University of London; Percy Cohen and Ralf Dahrendorf, now respectively Professor of Sociology and Director at the LSE; Norman Dennis, now of Newcastle; David Lockwood, now of Essex; Cyril Smith, now at the Social Science Research Council; J. H. Smith of Surrey; John Westergaard, now at Sheffield, and myself, now ensconced at Oxford.

I am, in other words, describing an LSE group which became a significant part of the sociological establishment by the mid-1960s. They did not monopolize sociological development between 1950 and 1965: their immediate predecessors remained active - Jean Floud, Michael Young, Donald Macrae, Tom Bottomore, Tom Burns and Ilya Neustadt.

Contemporaries from elsewhere followed similar careers towards the professoriat - Peter Worsley and John Barnes from Cambridge; anthropology, Joan Woodward from Oxford, John Rex from South Africa, Stanislaw Andreski from Poland. And the school continued to send graduate students to join them - Bryan Wilson, John Goldthorpe, Frank Parkin. Yet those enumerated began as a more or less self-conscious group, and ended as more or less prominent individuals in the British sociological professoriat, scattered about the country as the heads of newly-created university departments. Such group identity as they had in the 1950s was lost in the 1960s, its boundaries engulfed by the tide of new recruits to the profession for which they had clamoured.

The story is therefore restricted to a period, as well as to persons. It is restricted, too, to a short essay which is not a "researched" history but a personal appraisal of past events: not a complete account but an answer to particular questions about those who graduated from LSE in the early 1950s to be dispersed by professional success during the 1960s.

Who were they? A short answer is that most were provincials: provincial in social origin, provincial in political preoccupation, and provincial in their early jobs. A longer and more adequate answer would recognize the provincial as only one kind of outsider and so would take account of the three others who were foreigners, Cohen from South Africa, Westergaard from Denmark, and Dahrendorf from Germany. Native or migrant, they were all initially sleepwalkers but their education and profession led them towards metropolitan and cosmopolitan recognition which was scarcely attained before their subject and their academic calling

had again been transformed. In the 1960s 28 new university departments of sociology were created. A feverish expansion of staffing went on throughout the decade from each year's output of graduates against a background of new student radicalism in America and Europe. By the 1970s they had become a middle-aged minority so small as to be barely noticeable among the diverse armies of their younger colleagues. Yet before their time sociology as an academic profession hardly existed. Its British origins as a mode of thought can, admittedly, be traced into the nineteenth century and beyond. Nor did nineteenth century Britain lack distinguished political arithmeticians, social philosophers and social anthropologists. As Philip Abrams has put it in his *Origins of British Sociology*, the failure of sociology to develop in Victorian Britain was not a consequence of inadequate intellectual resources. The difficulty was to find recognized sociological posts for able people in a society which

provided numerous outlets for social concern of a legitimate, satisfying and indeed, seductive nature; all these were disincentives to role-innovation. Above all it provided for a large and apparently open class of "public person", access to government. Use what indicators you will, it is clear that whatever happened to the British economic, British government, both amateur and professional, grew continuously and faster than any other throughout the nineteenth century. The political system was growing and malleable. Performing administrative and intelligence functions which might have gone towards sociology had such opportunities not been there.

Even when in the Edwardian period (with social anthropology already securely established) sociology began at last to be institutionalized - Victor Branford and J. Martin White, Geddes and Hobhouse, Francis Gantton and Frederic Harrison - were, Abrams claims, "one of three things: wealthy amateurs with careers elsewhere, academic deviants, or very old men". Nor did the first half of the twentieth century bring much change. Between the wars the British universities continued to ignore the academic claims of sociology and it was virtually confined to London. The LSE 1950 group was the first to find adequate institutional support. It was the first set of individuals to be absorbed into the university senior common rooms by the normal processes of undergraduate and graduate education in their own

But what subject, precisely, was that? Sociology in the now received view is continental in origin. It has been the European reply to Marxism. Is that the subject which was taught to undergraduates at LSE in the late 1940s? Certainly not directly. On the contrary the LSE syllabus still rehearsed the nineteenth century battles between the statistical empiricism of the London Statistical Society and the synthetic or orthogenetic evolutionism espoused by L. T. Hobhouse.

"Classical sociology" as developed on the continent by Weber, Durkheim and Pareto was imported into LSE for the most part by Edward Shils in the form of *Poisons of Social Action*. An assessment made of the 1950 graduates made of the confused sociological inheritance offered to them is therefore of their intellectual preoccupations. The social attitudes, antecedents and responses of the 1950 group are unquestionably important background, but insufficient explanation of the emergence of their aspirations towards academic careers in sociology. They chose to come to LSE carrying a picture of their country as a status hierarchy still strongly entrenched but now outmoded by the social democratic revolution which promised and for which Laski's LSE was an intellectual instrument. Obviously the experience of the school came closer to *sine qua non* despite some important limitations and discouragements. Knowing that sociology had no place in, and that golden triangle of politics, power and letters, they came to study at a place which, though physically in what Edward Shils later depicted as the "Oxford-Cambridge-London" axis. The LSE was an intellectual-cum-political Mecca; its buildings sprawled in grimy liveliness on the east and west sides of Houghton Street off the Aldwych. Demob suits and battle jackets, incongruously adorned by the college scarf thronged the street between the two main lecture theatres. The library was heavily used, assailing the nostrils with the mustiness of books and the sickness of human sweat. The

students' recitory was cluttered with cheap and unappreciated socialists' student union pub. The Tims, normally permitted no more than standing in discomfit, but were indifferent to the chaotic splendour of the architecture. The conveniences of a human and humane life of no significance by comparison with the conversation and the vitality and audibility of great school. The tradition of first year undergraduate lectures by the most eminent professors was fully and enthusiastically practised. So they listened to Hobbes, Popper, Tawney, Leavis and Ginsberg, and absorbed the citizenship of the social sciences.

Of course, the intellectual exercises were inextricably interwoven with the social experience of getting to know each other and their future establishment attitudes towards modern universities in general and sociology in particular, and of contrast between their own rhapsodies and those of the typical young English don. A few years later Kenneth Tynan, characteristic historicist, dramatized the same conception of establishment attitudes in an epigrammatically angry letter to Young Man about to graduate in 1956. He spoke to and for the class of rising 1944 Act members: "You are", he wrote, "among the per cent of undergraduates who are receiving financial aid from the State and your position as such is defined, fearlessly and unequivocally by Somerset Maugham in his Christmas 1955 message to *Sunday Times*. They are seen."

Tynan thought that Maugham had been a bit harsh, but what he had, he added, was a rallying cry of social and political. "They are useless, or rather, they are drawn to every class except the top one. They need a platform to articulate their impatience with convention, with 'good taste', with British prejudice."

Tynan offered one platform - his own dramatic criticism, Osborne's plays and Kingsley's literary novels. The sociological analysis and criticism. It was as brilliant and more conventional in its consciousness of continuity from the Victorian and Edwardian working class, the Unions, the Co-operative Societies and the Labour Party were the foundations of a New Jerusalem, a free and socialist Britain. It then party and their Atlee government lagged behind, their idealistic impatience called for renewed radical persuasion. It did not require a total therapy of revolution and the massere of people by their own countrymen. Resolve, pressure, argument and firm insistence on democratic action would be repented necessary over a long haul. But democracy and decency need never be abandoned.

LSE postwar sociologists were committed to a socialism which had no need for communism and no time for communalism. Then the intellectual provincialism of sociology added a further vocabulary which, but only *inter alia*, led to confrontation with Marxist theory. The confrontation was not at first direct. Though Ginsberg's synthesis of rational ethics and the evolution of social institutions was remote and limp, it was, however vaguely, consistent with the Labour programme of radical institutional reform. Clearer was the work with Ruth Glass in urban sociology. Nevertheless, the aspects of his Marxism which were most apparent were also characteristic of the group as a whole, hostility to social inequality and commitment to empirical research. Some at least of the others have spent their subsequent sociological lives in at least partially successful search for a viable synthesis. A Marxist such as Perry Anderson would dismiss such a claim as preposterous, suggesting that British sociology remained the "poor cousin" of social work and social administration.

The point about such a sneering dismissal is not so much the view of social theory which lies behind it as its rage against any sociology which is not subordinate to revolutionary politics as defined by Marxists. In that sense, it is a judgment narrowed by the blinkers of 1968 in which time, after a quinquennium in which the number of social scientists in the British universities had tripled, the character of sociology had shifted decisively towards a chaos of conflicting ideologies. Anderson's prejudice prevents him from appreciating the radicalism of these post-war

For some, perhaps the majority of undergraduates the assured expectations of the professors gave no more than an impression of majestic social scientific scenery. Two men stood out as guides to further ambition: David Glass and Edward Shils, an American. Both oddly enough were indifferent lecturers, but endowed with a compelling charisma (a congenit word avidly acquired especially by those with no religious education). Glass offered a method, Shils a theory. Glass was the active leader of empirical research on the social

structure of Britain. Radical in politics as privately angry as he was publicly knowledgeable about social inequality, precise in research technique, learned in the LSE tradition of demographic and statistical investigation, he was doing what they aspired to do. Ambition seemed therefore both consistent with their political outlook and practicable to their personal capacities.

An alternative span to academic aspiration came from Edward Shils who not only presented classical European sociology to them but did so in an American voice which simply assumed that undergraduates would become graduate students and subsequently professionals. His blend of tutorial ferocity and Olympian erudition challenged their still half-formed ambition to fertile effort. His *Current State of American Sociology* (1948) conveyed the idea that a subject of great difficulty and worth was at once both dignified in its European antiquity and accessible in its American modernity. Sociological research was a living practice as well as a hallowed tradition.

It was not so with Morris Ginsberg, the head of department, whose lucid discourse, so lovingly concocted on L. T. Hobhouse, portrayed a subject both complete, and closed to lesser minds. It was an opportunity sully lost, for the philosophical sophistication and the knowledge of social history which he commanded were, in principle, a theoretical basis for the political enthusiasms of his postwar audience. He was aware that attention was shifting mainly to American work towards which he was gently but firmly dismissive, regarding most of its leading exponents as verbose and pretentious. It was not that his own learning was in any way limited. On the contrary, he was familiar with the major and minor European authors, appreciated the importance of Max Weber in Germany and Emile Durkheim in France and he had been quick to provide a critical introduction of Pareto to the English-speaking world. He was aware of, and lectured on, German phenomenology a generation before it became fashionable in American and Britain.

The idea of progress to which Ginsberg adhered had been maligned in Flanders in the First World War and finally destroyed at Belsen in the Second. His postwar audience heard him as the advocate of a nostalgic rationalist humanitarianism. It seemed as arid as Durkheimianism to Vigorous young men wanted a future as well as a past. Their politics assumed the practice of progress and they were ready to believe in some version of the idea of progress. Ginsberg's version would not do. They looked elsewhere in sociology for a theoretical answer.

It is questionable and questioned whether they ever found it. Classical sociology may perhaps be best thought of as the liberal reply to Marxism. If so it was a central feature of their provincialism that they were unschooled in, and conditioned to be resistant to, either the Marxist thesis or the liberal sociological antithesis. John Westergaard was the exception. He was an avowed Marxist whose early work was with Ruth Glass in urban sociology. Nevertheless, the aspects of his Marxism which were most apparent were also characteristic of the group as a whole, hostility to social inequality and commitment to empirical research. Some at least of the others have spent their subsequent sociological lives in at least partially successful search for a viable synthesis. A Marxist such as Perry Anderson would dismiss such a claim as preposterous, suggesting that British sociology remained the "poor cousin" of social work and social administration.

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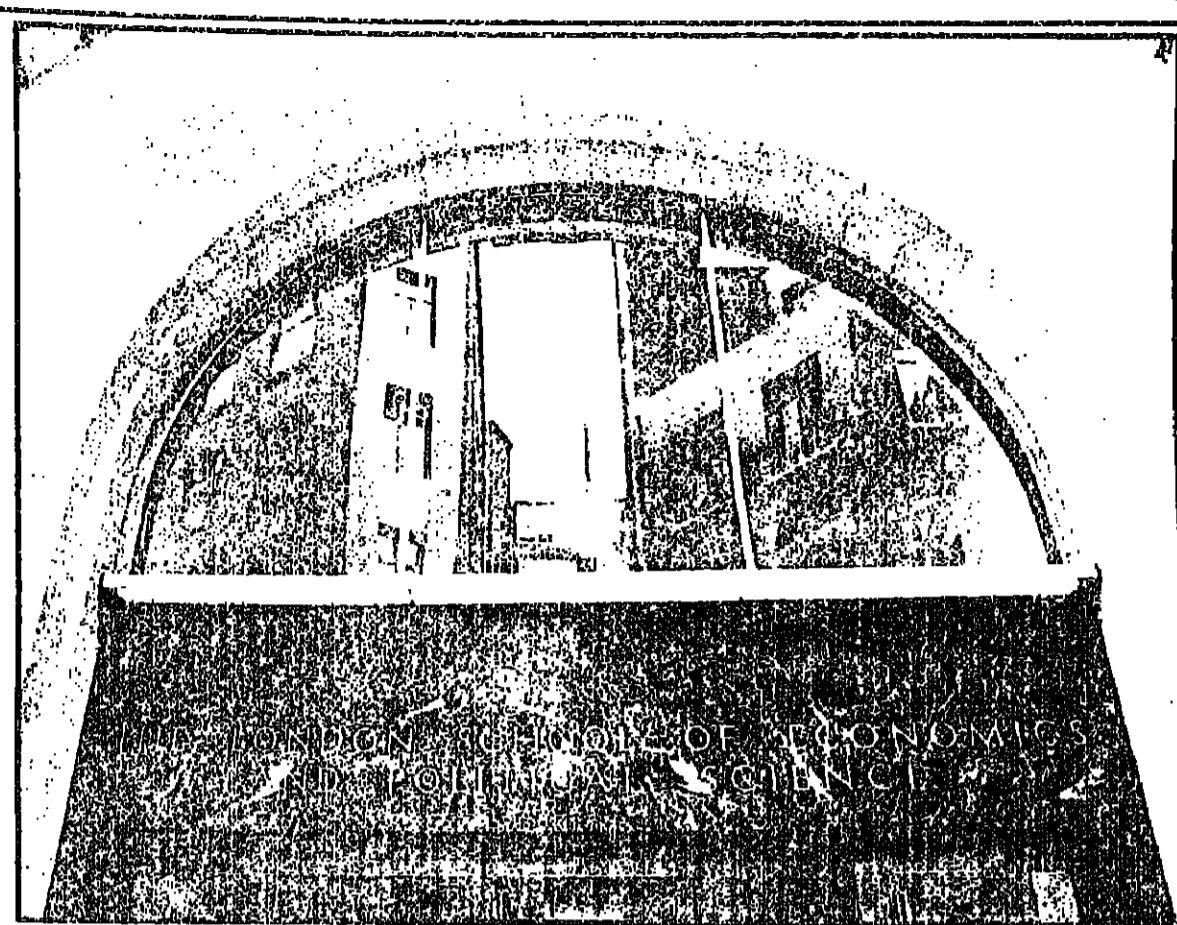
British sociologists. Theirs was indeed a provincial radicalism but none the less passionate for that and none the less powerful in its impact on the consciousness of the ruling academic and political elite. The ex-service students had had a childhood in committed Labour families to which was added the experience of war with its siege socialism, the sense of a just cause against Fascism, and the promise of a planned and open society without the unteachability of a communist state. With these social experiences they felt no need of Marx to support a radical fervour.

As an interpretation of their experience as working-class children and patriotic soldiers, Marxism in practice was read and heard more as the shifting propaganda of the Russian foreign ministry than as an analysis of the social structure of their own country. The polarization thesis they knew to be at least as much rhetoric as reality, very useful rhetoric in debate with "them" (the Conservative rulers and their representatives) but one for which they had viable and powerful alternatives whether from the *Magnificent* or from Tawney or William Morris or Orwell. Marxism was for middle-class newar intellectuals. Russia was for the Webbs. Such events as the Hitler-Stalin Pact 1939, Czechoslovakia 1948, The Twentieth Congress and the Hungarian Revolution of 1956 only confirmed the stubbornly held conviction that Marxism-Communism had nothing to do with the socialism to which they were committed - a democratic socialism without secret police and suppression of free speech.

They did not hate or reject their country. For all its persistent inequality, the snobbery which branded the tongue of every British child, the stupidity and incompetence of the slump Tories, and the stuffy closedness of the culture, nevertheless they knew Britain as a decent society. They were content that the democratic institutions invented by the Victorians and Edwardian working class, the Unions, the Co-operative Societies and the Labour Party were the foundations of a New Jerusalem, a free and socialist Britain. It then party and their Atlee government lagged behind, their idealistic impatience called for renewed radical persuasion. It did not require a total therapy of revolution and the massere of people by their own countrymen. Resolve, pressure, argument and firm insistence on democratic action would be repented necessary over a long haul. But democracy and decency need never be abandoned.

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The LSE was an intellectual-cum-political Mecca

systematic exposure of inequality strongly reinforced the bridge from social theory to political action. Yet more important was the impact of Karl Popper's justification of "piecemeal social engineering". While they may have chafed under its implications of extreme caution, they were comforted and encouraged by a theory which simultaneously offered reassurance that reformist rather than revolutionary change was likely to be most effective and (what they ardently wanted to believe) that the logic of discovery permitted an important role to the social scientist in the process of social reform. Sociology could be seen as an intellectual trade union to solve problems by the hypothetico-deductive method. There was a logically justified place in the syllogism for theory (ideals), method (research), and substance (political action).

Functionalism, it should be added, now ritually slaughtered before first year undergraduates every Michaelmas, was not the unmitigated sociological piety of the 1950s which the fashion of the 1970s made it out to be. True, it was rescued "politically" for the LSE group by R. K. Merton's ingenious defence of its analytical neutrality in *Social Theory and Social Structure* (among the two or three most exciting publications of their student years). But they were never wholly reconciled to the Functionalism Parsons embraced any more than to the Hobbesian harmony offered to them by Ginsberg. Nevertheless, suspicion of a theory of theory or method were involved, though passions could flare occasionally over the value of empirical enquiry. Productivity suffered.

The contrast with provincial university life was marked. Leicester, under the leadership of Neustadt and Elias, became a highly successful teaching department attracting creative young lecturers like Goldthorpe, R. K. Brown, Cohen and Anthony Giddens, and producing a flow of

graduates to challenge the previous monopoly of the School. Research in the new departments in Birmingham, Liverpool, Leeds and Manchester was developing with energetic enjoyment - the enjoyment perhaps of people with opportunities beyond their expectations, and the energy perhaps of people with nervous resentment of the continuing hostility to sociology of the high establishment.

Sociology was finding a tracing climate in provincial England in the late 1950s, yet there was also ambivalence and anxiety about the social and personal implications of attained ambitions to become a career sociologist. Reviewing the contemporary novelists who were "setting out to show the vitality and humanity of provincial life - particularly Mr William Cowper, Mr Kingsley Amis and Mr John Wain", Edward Shils asked, "do not their heroes, on different levels of talent, find their appropriate salvation in Oxford or London?" This was a dilemma for the sociological aspirant. It was not so much that they wanted a totally different culture from that of the metropolitan class. But they did want to widen its compass, to give it more catholic sympathies, to include its provincial and international sources, and, above all, to have an acknowledged and equal right to participate in that which their experience of grammar school, the Nissen hut and LSE had shown them to be their birthright and their competence.

The conquest of Oxbridge was in fact already in train and rapidly completed in the 1960s. Goldthorpe was elected to the King's College Fellowship. Lockwood followed with Michael Young to lectureships in 1960. Sociology was introduced into the Cambridge economics tripos in 1961 and into Oxford PPE in 1962.

One version of the end of this story would be to note Ralf Dahrendorf's appointment to the directorship of the London School of Economics in 1974. The postwar sociologists had scattered from the School twenty years before: it must have been a rare moment of vicarious pride to each of them that one of their generation - the first militant and determined group of professionals in the subject in Britain - had been called to the high position once commanded by Beveridge and by Carr-Saunders. They had carried the domestication of sociology into the social science faculties even of Oxford and Cambridge; and now from their chairs and their middle age they could enjoy the conquest of their original institution.

addition to knowledge of the changing social structure of Britain. In one important sense it was a sociological expression of autobiographical experience - a projection of the country they had learned in their families, schools and local communities. In another sense it was, as Aron suggested, a sociology of the programme of Labour Party reform. But in its most fundamental sense it was the assimilation of international sociology and its application to the understanding of British society. In their labours the group made obeisance to a powerful Pantheon. It was neither a piety nor a shrine to any particular theoretical orthodoxy. Marx, like Parsons, held an honoured place but by no means dominant place.

The LSE locus of the group began to disintegrate almost as soon as it was formed. By 1954 it had become a set of research workers and junior lecturers, mainly in the provincial universities. They were in touch with each other through the British Sociological Association (formed in 1951) and through occasional seminars at Birmingham University. The LSE itself was passing through one of its phases of institutional self-doubt and the sociology department was somewhat fragmented. The atmosphere of the department was clouded with obscure hostilities between individuals and small groups generating negative and uncharitable attitudes to each other's work. It is doubtful whether any clear principles of theory or method were involved, though passions could flare occasionally over the value of empirical enquiry. Productivity suffered.

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The author is director of the department of social and administrative studies at the University of Oxford. A longer version of this article has appeared in the *European Journal of Sociology*.



Edward Shils was responsible for importing 'classical sociology' to the LSE



Dahrendorf, Cohen and Banton were part of the group







# BOOKS

## Grand old man of revolution

The Cult of the Revolutionary Tradition: the Blanquists in French politics 1864-1893 by Patrick H. Hutton University of California Press, £17.25 ISBN 0 520 04114 3

Louis Auguste Blanqui was the most famous of French revolutionaries. When the students of 1968 dismissed in scolding graffiti, the Marx who was in the British Museum and was missing from the bookshelves, they were (one hopes) comparing him to Blanqui. This master of insurrection was, like them, the martyr of the turning points when France failed to turn. No less than 43 of his 76 years were spent in prisons, and he knew the dungeons of some thirty different penitentiary establishments (including the Mont-Saint-Michel). His life spanned five different political regimes, but when he died (in 1881) he was still actively involved in conspiracy and still convinced of the likelihood of successful revolution. In spite of life-long failure and suffering he was an inspiration and a model, one whose faith, resolution and courage convinced as much as they astonished.

Marx admired Blanqui's revolutionary ardour, but he chided him among these professional insurrectionists who were isolated from the workers, as they deliberately fostered excitement and a sense of danger. It was true that these organizers of resistance could carry out the daring coups which caused disarray in the government ranks, but Marx foresaw the outcome of such ventures. Typical of Blanqui's ill-fated activities were the occupation of the Hôtel de Ville in 1838 (for which the Orleanist government sentenced him to life imprisonment) and his attempt to dissolve the National Assembly and to set up a new provisional government, again at the Hôtel de Ville (the Republican government, which had freed him in 1848, sentenced him to ten years' imprisonment). This was revolution by declaration and act of will - heroic and hopeless.

His reputation was based on his suffering and upon his role as the representative of the authentic revolutionary tradition. He is both a romantic hero and a sage, a sort of grand old man of the revolution. Attempts have been made to put together his writings and his speeches, and the disorganised remnants of his correspondence in the Bibliothèque Nationale have also been used in order to construct some sort of Blanquist doctrine or theory. The author of this book joins in this search, and emphasizes to what extent, Blanqui was dependent on a simple anti-clericalism, a demand that the people should rid themselves of their opiates and adopt a robust atheism. But the real purpose of this book, its originality and importance, lie in its attempt to work out who were the Blanquists, the people who claimed Blanqui rather than Marx as their leader and who thereby added a further complexity to the ideological division of the left.

The Paris Commune of 1871 affords one of the best opportunities for assessing the role of Blanqui and that of his followers. As Professor Hutton shows, there were those among the communards who regarded it as essential that Blanqui should come to Paris and be present among them. But on the eve of the Commune, Blanqui had been arrested while staying in the Lot, and the authorities had removed "l'Enferme" (as he was inevitably called) to more and more distant prison sites. Communards tried to negotiate his release, and put forward some of their own prisoners as hostages who would be exchanged for him or who would be executed were he not set free. Indeed some of the atrocities which were committed in the concluding days of the Commune, and

which have been overshadowed by the terror exercised by the troops sent in by the Versailles authorities, were probably the outcome of these negotiations and threats. As it happened, Blanqui was kept in prison until 1879, and the desire to enforce his release remained the prime aim of those Blanquist refugees who gathered in London. The suggestion is that this preoccupation with a symbol of martyrdom within Blanquism is myth which predominates over reality. After the Commune the Blanquists were convinced of the significance of their experience in a way which hardly coincided with the facts, but it persisted in spite of more rationalist, Marxist arguments.

This book seeks to identify and to explain those who were Blanquist. It takes issue with those who magnify the role of Blanquists in the Paris Commune, and it criticizes those commentators who concentrate exclusively on a number of isolated individuals, such as Louis Rigault and Théophile Ferré, the sinister figures who were responsible for the atrocities. Professor Hutton successfully demonstrates how the power of these two men depended on the support of the Blanquist subordinates at the Prefecture of Police, and how their activities, centred on certain stereotypes: hostility to priests, to police, to police informers, and the conviction that by looking to these details a great and important change would be effected.

This is a book which is heavy with significance. It presents many lessons: how the revolutionary can move from what is normally thought of as the left, to what is usually considered to be the right; how the revolutionary is dependent upon tradition and ritual; how the revolutionary can be at one moment constructive and creative, at another moment destructive. From this exact, and at times intense, study of an essential movement, there is much to be learned.

### Douglas Johnson

Douglas Johnson is professor of French history at University College London.

## Manic monarch

Kaiser Wilhelm II: new interpretations edited by John C. G. Röhl and Nicolau Sombart Cambridge University Press, £19.50 ISBN 0 521 23898 6

"It was not William II who shaped the Reich politics of his period but the traditional oligarchies together with the anonymous forces of the authoritarian polity." Thus Hans-Ulrich Wehler, in what has become a standard history of Imperial Germany (although, sadly, not yet translated into English), dismisses the role of Wilhelm II as a figure standing on a hollow pedestal.

This new collection of essays on Kaiser Wilhelm II has to be read against the background of this influential interpretation. In his introduction, Professor Röhl ably sets out the historiographical context, and outlines the three main themes of the book: "the Kaiser's personality, his influence on policy-making, and his role in German society."

This introduction is an attempt both to meet in advance criticism of a "personalistic" approach to German history and to integrate a closer view of Wilhelm II with the broader questions of how to interpret the period. Thus Professor Röhl asserts that "the study of Wilhelm's inner circle is 'as much social history and social psychology as it is high political history', a challenging and potentially rewarding formula.

The first three essays in the volume concentrate upon the personality of the Kaiser. Professor Röhl draws a character sketch of the capri-

cious monarch; Thomas Kohut presents us with an examination of the "psychological roots of German policy towards England" found in Wilhelm's tortured relationship with his parents and, particularly, his English-born mother; and Linaur Cecil, in an elegantly-written essay based upon materials in the Royal Archives at Windsor, offers a view of the Anglo-German antagonism in which Wilhelm's difficulties with his uncle, Edward VII, occupy a central place.

The picture of Wilhelm which emerges is of a suitable case for treatment: a "manic or manic-depressive" (Röhl), a "narcissistically disturbed individual who lacked cohesion at the centre of his personality" (Kohut), a monarch who was plagued by a "sense of inadequacy" (Cecil). This certainly makes for a good read, as does Jonathan Steinberg's account of Wilhelm's state visit to Britain in 1907 (as the author admits, "not a great event"). But for those not fascinated by royal gossip, the importance of such glimpses into the Kaiser's rather twisted mind lies more in what they reflect of German society and politics than in the insights they provide into the behaviour of the monarch himself.

It is the discussion of the Kaiser's role in policy-making which forms the core of this volume. Here Paul Kennedy provides a characteristically comprehensive review of Wilhelm's role in the formulation of foreign policy. Isabele Hull offers an examination of the "Lieberberg Circle" and its influence upon the Kaiser and, through him, upon German politics. The relationship between Wilhelm and Reich Chancellor Bernhard von Billow is discussed in two informative essays: by Kathy Lerman on the years 1900-1905, when the two men had a good working relationship; and by Jennifer Cole on the Daily Telegraph affair, when Billow was no longer willing to act uncritically as his master's political chief of staff. And in what is probably the most impressive essay in the collection, Wilhelm Deist analyses the Kaiser in the context of his military entourage.

At the centre of the Kaiser's power stood the *Kommandogewalt*, the command of the armed forces which placed the monarch in effect above constitutional control. Dr Deist carefully analyses the extent to which Wilhelm was able to effect his designs in the military field and why, with the outbreak of war in 1914, "it immediately became obvious that Wilhelm's right of Supreme Command had become a mere fiction". The third theme of this collection, the Kaiser's role in society, is arguably the most important. To what extent did the Kaiser, as an image, serve to hold the system together? What were the attitudes of the mass of Germans towards the Kaiser, and how did they change? How much did the institution of the monarchy and the behaviour of the Kaiser shape public opinion and values? Unfortunately, the final two articles do little to answer such questions.

In her essay on "German attitudes to Kaiser Wilhelm II", Elisabeth Fehrenbach asserts, rather than demonstrates, that "the Kaiserdom of Wilhelm II proved to be an integrative force of surprising effectiveness" to establish such a claim requires more than reference to the opinions of Rathenau, Meinecke and other prominent figures at the time. And Nicolau Sombart, in his stimulating but very general essay on "the Kaiser and his epoch", approaches Wilhelm but a cultural anthropologist. The result is some reflections on the nature of Wilhelm's society and the politics and some fascinating suggestions about the dominance of "male roles" and "the repression of the feminine".

However, the volume is sorely missing a well-researched social-historical investigation of popular attitudes towards the monarchy and its 1918. It emerges fairly clearly that Wilhelm II shared the values and prejudices of his age; what remains unclear is the extent to which the Kaiser shaped those values and underpinned the *Kaiserreich*.

### Richard Bessel

Richard Bessel is lecturer in history at the Open University.



Portrait of Augustus from Prima Porta, near Rome, taken from Tim Cornell and John Matthews' Atlas of the Roman World (Phaidon, £17.50).

## On the war-path

War and Society in Revolutionary Europe, 1770-1870 by Geoffrey Best

Leicester University Press, £12.00 and Fontana, £2.95 ISBN 0 7185 126 X and 0 00 634747 9

European Empires from Conquest to Collapse, 1815-1960 by V. G. Kiernan

Leicester University Press, £12.00 and Fontana, £2.95 ISBN 0 7185 126 8 and 0 00 634826 2

The new Fontana History of War and European Society series, under the general editorship of Geoffrey Best, seeks to remind us of the importance of armed conflict in the development of European society since the Renaissance.

To the general reader who has grown up in this century of "total war", such a reminder might not seem necessary. In many university history departments in this country and abroad, however, the place of war and war-related activities in our understanding of the past is but imperfectly recognized, and still lingers at the margins of academic respectability. From constitutional historians on the one hand to economic historians on the other, war often appears as an inconvenient process of governmental change and technological development. No doubt the whiggish, unpolitical character of the British intelligentsia has largely contributed to this neglect, but the older type of military writer, who detailed regimental histories, battles, and ships' rigging, consciously or unconsciously helped to widen the gap.

Individual authors like Correlli Barnett and Michael Howard, and the Open University "War and Society" course pioneered by Arthur Mervin, have for over a decade preached the need to reintegrate the military strand into the seamless web of history. But since these new works are aimed at a larger readership they ought, proportionately, to have the greater impact. Finally, since they rest upon a considerable body of specialized recent studies, they ought also to reflect the state of current scholarship in this field.

Geoffrey Best's *War and Society in Revolutionary Europe 1770-1870* succeeds admirably in its overall purposes. Without neglecting the role of personalities and the course of military campaigns, he never loses sight of his main thread: how did the armed services interact with society as a whole during the three distinct phases of this period, that is, the great wars between 1793 and 1815, and the "restoration" era

which followed? With great skill and panache, he sketches the individual characteristics of all the major countries of Europe as well as the more general tendencies. Moreover, unlike certain authors in this field, Professor Best does not equate "war and society" with "armies and society" an absurdity for all European states west and south of the Elbe and Danube - and he gives a good account of naval developments.

By comparison, there seems a little here on the financing of the armed services, either in wages or peacetime, and yet this was a period when almost all central government expenditure and revenue collection was devoted to that end. The Crimean War, with its vast inputs upon Russia, France and Britain, also gets rather short shrift. These are, however, small defects on a broad and sparkling survey which ought to be read by all political, social and military historians of modern Europe.

Professor Kiernan's *European Empires from Conquest to Collapse 1815-1960* has a different but equally important remit: to explore the military dimensions of western imperialism, once it had turned away from the Napoleonic conflict to resume its encroachment upon much of the rest of the world. Since Britain and Russia were the chief encroachers, a great amount of space is given to their armies' activities in Asia; but the French in North Africa, other European ventures further south, and the maritime expansion into the Pacific are also covered. Apart from describing the actual campaigns, the book has excellent portraits of the soldiers' day-to-day life, and of the vulgarized public images of all this to European eyes. By the First World War and up to the Vietnam War - a half-century given, alas, too brief a treatment here - the task of the imperial soldiery had switched from the offensive to the defensive, as the European powers strove unsuccessfully to crush the indigenous nationalisms which they themselves had provoked into being.

Kiernan's book is written with extraordinary zest, which will leave his readers full of admiration (although possibly a little breathless, too). Its chief scholarly contribution is to re-orient the mind of the general reader and to show the energy and physicality of the European empires. Today's university students are inundated with works upon the economics of empire, the grand strategy of empire, which is very commendable but also rather abstract. This book is the perfect foil, recalling instead the Kiplingesque blood, sweat, toil and tears of extra-European conquest.

### Paul Kennedy

Paul Kennedy is reader in history at the University of East Anglia.

# BOOKS

## Claims for Smollett

Smollett: author of the first distillation edited by Alan Bold Vision Press, £13.95 ISBN 0 85478 434 9

Those of us who can find much to enjoy in Smollett have been frequently viewed with suspicion, laudably John Valdimir Price in his essay in this new collection. It's a cry that's repeated several times. David Daiches remarks that Smollett is an odd man out twice honoured in the breach by being excluded from those two very different traditions of the English novel identified by Ian Watt and F. R. Leavis. The contributors to this volume present themselves as an eccentric band of enthusiasts. Even the title, *Smollett: author of the first distillation*, is a deliberate piece of provocation that draws attention to its own bravado in the cheeky omission of a question mark.

The essays by different hands concentrate on a few key points: Smollett's vitality, his modernity and his Scottishness. The editor, Alan Bold, nails his colours to the mast in a brief introduction. "All that is required for Smollett to reclaim his position as a genuinely popular novelist is for the public to be made aware of the authentic character of his work." Tom Scott, a freelance writer, who describes himself as "living on air" sees in Smollett a kindred spirit, and treats us to a scathing defence. "Smollett is our contemporary... we must never read Smollett the way the academics would have us read him." The academic Professor Daiches, with an ironic cough before striking so modish a pose, agrees in arguing for Smollett's topicality. "A generation which is interested in... the relation of violence to moral feeling, might well find Smollett's novels, in one of their favourite forms, extremely relevant." Daiches's essay is a brisk and informative ramble through Smollett's works, pointing out the dangerous deviations into slapstick humour, the winding cul-de-sacs of interpolated tales, but never deviating from a high road of appreciative analysis.

Alan Bold, describing *Roderick Random* as "full of conflict, tense as a Scottish night out" introduces the theme of Scottishness which is developed by K. G. Simpson. Simpson's lengthy article grows increasingly misty as the particular quality of Scottishness becomes as a Simulacrum between Smollett's inventive and the "flying" tradition of Scottish poetry may be granted, but when we read that "ironic self-revelation is a feature of Scottish literature" that "multiple voices are characteristic of Scottish literature" and that the union of social historian and fantasist "is distinctly Scottish", we may care to add a little water to the Scotch. It's not clear to me that Arbuthnot, Boswell, Burns, Hogg, Lame, Kames and Smollett had something distinctively Scottish about them which marks them out from Burke, Goldsmith, Parnell, Sheridan, Steele, Sterne and Swift, the Irish writers of eighteenth-century English literature. Scotland in the eighteenth century, as Simpson shows, was a country of great contradictions, between the primitive clansmen and the enlightened elite of Edinburgh. So when Smollett is violent and energetic he is Scottish; when he is subtle and ironic he is Scottish too; and when he oscillates between the vastness of the eclectic diversity of his native land, the inevitable tendency of such broad definitions is tautology.

Robert Giddings has smuggled in an article on the slave trade in Bath. Rather implausibly he interjects at the "villainous smells" and "seropholous ulcers" of the baths and pump room where "we swallow the strappings of rotten bones and car-



Smollett, painting by an Italian artist

cases" as a symbolic prefigurement of Marx, "literally bodying forth Marx's concept of the system's carrying within itself the seeds of its own destruction". Continuing the theme of Smollett our contemporary, Damian Grant sees *Roderick Random* as the work of "an angry young man". Like Joe Lampton, this angry young man soon learnt to love the system though, and Ian Campbell Ross shows how *Peregrine Pickle* presents the education of the perfect country gentleman. When Perry gets into drunken fights, they are not Sauchiehall Street brawls, but the high spirits of a young gent after a boat club supper. Beneath the radicalism and the protest, Smollett shares with the earlier Augustan satirists a deep conservatism. "Again and again", writes Daiches, "we find in Smollett that the ultimate felicity is to land up with a country estate, loved and esteemed by one's tenants and the surrounding rustic."

This is a useful and interesting volume, though it offers nothing very new in its interpretations. I only wish it weren't so anxious to prove that Smollett is good, modern, relevant and "fun".

### David Nokes

David Nokes is lecturer in English at King's College London.

## Redrawing the map

Wordsworth and the Figurings of the Real by David Simpson

Macmillan, £15.00 ISBN 0 333 30631 7

Perspectives on Romanticism: a transformational analysis by David Morse

Macmillan, £12.00 ISBN 0 333 28297 3

David Simpson's tightly argued book deals illuminatingly with the relationship in Wordsworth's work between the mind's perception of "reality" (or, more strictly, that which is not mind) and the imagination's "figuring" of that reality. Thus on the question of Wordsworth's inconsistency about whether the mind or nature is the active partner in the relationship, Simpson offers a persuasive answer:

The *Prelude* presents a whole range of formulations of the mind-world relation, varying from active mind (and passive nature) to active nature (and passive mind), with consequent variations in the attribution of the "real". Thus the poet is unsure whether he has "transferred/His own enjoyments" to nature in a process of anthropomorphism, or whether he really has "convers'd/With things that really are"... it must be stressed that Wordsworth's version of the relation is actually an *interchange* through time, a process of which no one extrapolated moment or incident is properly representative.

Wordsworth's writings can be seen, according to Simpson, in the context of the increasingly open, even relative, theories of mind, art,

### Rosemary Ashton

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## Keeping time

Time in the Poetry of T. S. Eliot by Nancy K. Gish

Macmillan, £15.00 ISBN 0 333 28994 3

T. S. Eliot's Intellectual and Poetic Development 1909-1922 by Piers Gray

Harvester Press, £22.50 ISBN 0 7108 0046 0

Of Nancy Gish's book it might be said, if the going were easy, that it is the work of an intelligent and well qualified scholar; that it treats Eliot's poetry as a quest for the Bergsonian moment of intuition in which the mere passing of time is transcended; and that it advances the argument that it is not until *Little Gidding* that such a moment is achieved. By a more demanding standard, however, it has to be said that the book is far from offering an adequate explanation of Eliot's thinking about time; and that its periphrastic commentary on the poet, in order to reduce to comfortable commonplaces his searching and urgent realization of his thought.

Gish does come near to saying that Eliot's way of transcending time is by choosing to "keep time" in the fullest sense. Yet she is so far from seeing what that means in the practice of the poetry that she can conclude: "*Little Gidding's* calm assured tone rests on a separation of thought and feeling in which intellectual ascent to timelessness replaces personal experience of time." I would have thought rather that it rests on an integration of thought and feeling; that what is being understood, as the work of divine love, and therefore assented to, is precisely the personal experience of "the waste sad time". Transcendence, for Eliot, does not mean escaping "the intolerable whirl of time", but wearing it with a difference. His meaning is not something separate from experience, as his critics too often expect it to be. It

is simply a special mode of experience, a way of being conscious of experience while still within it.

Piers Gray's "intellectual biography" bears out its subject's remark that the labour of the PhD thesis is fatal to the development of intellectual powers. It crushes originality, it kills style. The first two chapters, about a third of the book, contain much lively and acute criticism. The discussion of "Rhapsody on a Windy Night", for example, is both illuminating about the connections with Laforgue and Bergson, and very perceptive about the linguistic and stylistic subtleties of the poem itself. Gray is aware that the meaning is not "given", but is in the making.

It is therefore a real disappointment when he turns away from the poetry and loses sight of it in the "background" of the young Eliot's philosophical studies. The chapters on Bradley and Royce and Eliot's own philosophical essays fall somewhere between philosophy and literary criticism without serving the purposes of either. Moreover, they omit much that was important in Eliot's development, such as his studies in Eastern, Greek and Christian philosophy, and in Spinoza. His literary masters, apart from some French poets, are virtually ignored. I assume it was the requirements of the doctoral thesis which drove him into the background, in order to demonstrate scholarship as against mere erudition; while not requiring the scholarship to be either adequately comprehensive or wholly relevant.

Gray does raise and pursue the very pertinent question of Eliot's concern to discover coherence in history and so to transcend it. But, like Nancy Gish, even though his book is more substantial than hers, he stops short of seeing Eliot's achievement where it was most developed and is most visible. And the cause is the same, the delusion that we can separate the meaning from the making.

### A. D. Moody

A. D. Moody is reader in English at the University of York.

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# COMPUTERS IN HIGHER EDUCATION

## Micro-centres of expertise

Computing devices have become increasingly important in the academic environment during the past two decades, and as their cost and size have decreased, they have been used in a wide range of disciplines in an expanding variety of tasks. When computing systems were expensive, large and difficult to operate, their use was almost exclusively confined within central computing facilities. Now, however, most departments are able to afford the small microsystems on the market, so that now many of the services remain the same although central computing facilities are no longer part of the computing capability of an individual department which is still heavily biased towards the support of analysis, equipment control, information selection and processing, and the execution of complex calculations. The needs of industry and commerce have also necessitated the development of new undergraduate course options in microtechnology.

The funds for computing equipment in universities come from three main sources: the University Grants Committee (UGC), the Computer Board for Universities and Research Councils, and the various research councils themselves. The UGC provides a general equipment grant to each university which then decides how to distribute it to its various departments. Obviously some of this money is used for computing equipment but the money provided to an individual department will be rather limited and will often be used to "top-up" existing equipment either in the department or in the computer centre. The Computer Board is responsible for funding central computing resources in a university for use by all departments. The research councils provide computing facilities (local or central) for research projects which require services either generally available or which would place too large a demand on a central facility. The Computer Board and the research councils work closely together, the specialized services provided by the research councils being duplicated in central services, leaving the research councils to pioneer new services.

In 1977 the Computer Board realized that the new microtechnology would have a significant impact on central service provision. It therefore set up a Working Party under my chairmanship to investigate how its policies might be changed or augmented. More precisely the Working Party was charged to report... on the effect in the next ten years of microprocessors and other micro-technology on the provision of university computing services (especially as regards computer centres and their communications). The deliberations of the Working Party took place in an environment where many academic workers were suggesting that central services should be drastically reduced and that the money saved should be spent in enhancing individual departmental facilities. The Working Party did not concur with this view. It felt that micro-technology would have a broad impact across the whole spectrum of computing, large systems included, and that a major new initiative was needed to encourage the exploitation of the new technology in both research and teaching.

Central coordination of the initiative was regarded as essential. The Working Party therefore envisaged that central computing services would take advantage of the new, cheap and reliable hardware to augment their existing services and, at the same time, new microtechnology research workers and provide them with facilities for familiarizing themselves with the technology supported by hardware and software expertise in the centre. The report concluded that "universities should be encouraged to develop centres of micro-processor expertise which will provide advice, guidance and education

to user departments for both academic and service needs; the Board should concentrate its efforts in the service area".

The report had widespread acceptance and the Department of Education and Science provided about £1.2 million to assist with the implementation of the proposals. Virtually all universities have now set up the centres and some have been operating for about three years. Funds were also provided for staffing and recruitment needs.

One policy issue caused widespread discussion. The Working Party decided that the centres should be placed under the control of the local computer centre rather than academic departments. This was partly a result of the Board's remit in relation to university computer procurement. The Board is charged with allocating funds to assist a university-wide population. It must avoid favouring one department or supporting a particular research area. That is the task of the research councils. However, there were other reasons for the approach. It was felt that the research interests or priorities of an academic department should not dictate the type of service given. Furthermore, by its very nature a support service tends to be straightforward and repetitive. Although an initial collaborative effort in, say, data collection and analysis might be interesting and academically stimulating, subsequent repeat applications could be tedious and unrewarding to any department whose prime objective is research. It was also felt that the educational requirement was for training rather than education, a role that computer centres were accustomed to take.

The establishment of the central service-based centres was not intended to preclude the setting up of specialized centres in other academic departments and indeed some have been established, particularly in computer science and electrical engineering departments. Moreover, close collaboration has often been established between these and the Board-funded centres.

Two types of exploitation were envisaged. First, departments were expected to utilize microtechnology in the design of systems for data collection and validation of experimental control. This involves the building of electronic circuitry to control experiments and analyse data. It requires special purpose support hardware such as development systems, logic analysers, oscilloscopes and signal generators. This hardware needs to be backed up with software such as assemblers, editors, compilers, interpreters and simulators. The second type of exploitation concerns the use of standard microsystems already available in the market place (Apples, Pets, CPM-based systems) for computing tasks. A system might be used for econometric modelling, statistical calculations, or for testing out computer applications which might later be transferred to the larger central systems.

modification, and data processing. Examples will be given from Liverpool experience because obviously know these in detail. However, similar examples exist at all other universities. Data analysis involves the monitoring and collection of data by stand-alone devices sometimes placed (literally) in the field. The small size and low power requirements of systems based upon the new technology are obvious and the portable factors. At Liverpool, services have been produced which collect data about rock samples, sheep, worms in the blood, metallurgical properties and ripple tanks. Views simply collect data for analysis on other systems, or shared systems. Birmingham has also established a rather similar laboratory based on CPM systems. For computer science or electrical engineering the availability of a large number of stand-alone systems has proved invaluable in providing test-beds on which student projects can be based. This is often simply not possible on central systems. Finally, the knowledge gained by students at the present time is generating a new awareness of the potential of new technology which will shortly pay dividends both for university research and in industry.

The setting up of the university micro-centres has also had another useful spin-off. Local industry has often looked towards the centre for education and for collaborative projects. A number of universities have taken part in the Department of In-

formation and Universities have been very active in developing networks both for local and wide areas. Data processing applications involving standard systems have included economic modelling and civil engineering. The use of high resolution graphics (particularly in colour) has enabled new methods of analysis to be used. Finally, the cheapness and ease of use of the standard systems facilitated the rapid exploitation of new languages such as PROLOG.

The support for such a variety of applications requires a combination of expertise in communication signal processing, data processing and electronic engineering and it proved difficult not only to obtain staff but also to keep them. Although the above examples are taken from work done at the Liverpool Microprocessor Centre an examination of most other university centres would provide a similar picture. Since work at the different centres is often similar, it is important that there are strong informal links between them. This is achieved through workshops, seminars, publication of frequent reports, the south-west universities, for example, have produced an excellent quarterly bulletin which has been very well received. Other journals such as the *Journal of Microcomputer Applications*

# COMPUTERS IN HIGHER EDUCATION

continued from facing page  
published quarterly by Academic Press, also disseminate widely the results of endeavours in the centres.

On the educational front the new systems have been used extensively both for the direct teaching of computing concepts to undergraduates and for assisting understanding of laboratory projects. The University of Strathclyde has set up a laboratory based upon 60 Rel systems for language teaching. The reliability of such facilities is extremely high and students' work is not affected by the work of others, which so often happens on central shared systems. Birmingham has also established a rather similar laboratory based on CPM systems. For computer science or electrical engineering the availability of a large number of stand-alone systems has proved invaluable in providing test-beds on which student projects can be based. This is often simply not possible on central systems. Finally, the knowledge gained by students at the present time is generating a new awareness of the potential of new technology which will shortly pay dividends both for university research and in industry.

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## The electronic poly

Before 1960 virtually no computers could be found in colleges of further and higher education and most university computers were primarily occupied in trying to meet the "number-crunching" needs of scientific research. To the present day, the most powerful computing facilities in higher education are to be found in the University Regional Computing Centres, for example, in Manchester and Edinburgh. However, the accessibility of these major systems has been greatly increased by the development in the past ten years of data links between universities - the coordinated development of local area networks (LANs) and rings now provide the basis for a universities national data network.

Although the universities' commitment of their computing resources to research has remained high, there has been a rapid upsurge during the past ten years in the use of the computer as a learning resource. However, whereas commercial data processing has been notably absent from university courses until quite recently, most polytechnic courses have always devoted a significant amount of time to commercial computing procedures.

Computing facilities in polytechnics and colleges are required in three principal areas: (1) as a learning resource; (2) for research work; and (3) to assist administration. The feature, their use as a learning resource, may be considered in two contexts: (1) for teaching *about* computers (computing science courses and options at all levels); and (2) for teaching *with* computers (in all disciplines at all levels to assist the learning process). However, several problems still restrict the accessibility and use of the computing resource. First, some mainframe systems still do not offer to many educational users the easy access which they find on many microcomputer and mini-computer systems. Complex job control procedures may offer great verve and power to the computer professional or computer science student, but they usually discourage readily turning to the mainframe when their microcomputer runs out of steam (processor power or memory). Many major educational centres have to expend considerable

effort, by their systems analysts/programmers, in overcoming this drawback.

Second, there is a lack of cheap, flexible communications hardware and software to make the computing resources widely available to users on terminals wherever they may be - classroom, laboratory, terminal room or microcomputer complex. The particular need is for simple, standardized, interconnection of mixed manufacturer configurations, rings and networks. Fortunately, the Network Council of the Computer Board for Universities and Research Councils is making considerable efforts to remedy some of the deficiencies, and most manufacturers are moving towards the development of some form of inexpensive network/link hardware and software by the mid-eighties.

Third, and of prime importance, in many subject areas high quality applications software specifically designed for the learning processes is not yet readily available, although there is some good material around and several organizations are making determined efforts to remedy the position (for example, GAPE, MUSE, CEG, CET, MEP, CEDAR, CHESS to mention but a few). However, too much reliance must still be placed on bought-in commercial packages which may be excellent for their original task but are unsuitable for assisting educational processes where clarity of principle is more important than the capacity to deal with specific but complex tasks - another case of not being able to see the wood for the trees. Alternatively, there are also many programs which are teacher-dependent in the sense that they are very effective in the hands of the originator with his or her class but the performance falls off sharply when used by a stranger.

It would be inappropriate to spend much time here on this point. Depending on approach, however, computing material may be written as an extension of personal teaching technique or as a general device to provide, reinforce or assist the learning processes. Both approaches are valid and effective; the latter being more transferable but more difficult to specify and write. Design and production of this type of software by group efforts is still on a very limited scale despite the efforts of two national development programmes and some

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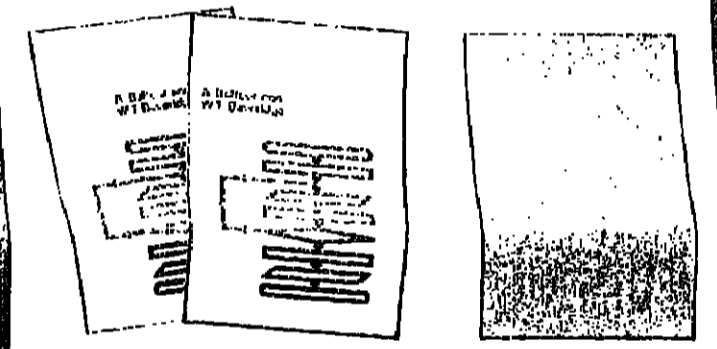
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# COMPUTERS IN HIGHER EDUCATION

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Main computer room at North Staffordshire Polytechnic

Typically, these would include student records, library cataloguing and stock control, accounting procedures, circulation lists and address labelling. There are now others on an individual basis, sometimes assigned to dedicated systems - library loans and returns being a typical example. The advent of microcomputers is leading to a re-assessment of the appropriate hardware for some administrative tasks which have already been computerized; others which may still be on a manual basis, may well be moved to microsystems more effectively now. Certainly, many tedious manual systems involved in producing management information and accounting are proving suitable for microcomputer application. The power and low cost of the microcomputers now available makes the provision of a dedicated computer system for administration a particularly attractive and viable proposition.

For the future, the administrative use will continue to grow on mainframe, mini- and micro-systems. Again, on a limited resource there is a need to avoid contention between the possibly conflicting demands of learning resource, research and administrative needs. This is another area in which standard software, as machine-independent as possible, could be of great benefit. This has been attempted in the past, student records being a typical example, but most institutions found it necessary to make significant modifications to the "standard" system to meet their own establishment's needs.

It should be noted that where any significant administrative workload is undertaken a corresponding systems analysis and programming commitment is inevitable for a successful and efficient service. Experience shows that even the most robust and developed program requires frequent modification to meet changes in administrative procedures inside or outside the polytechnic or college.

Computing resources in universities, polytechnics and major computing colleges have also been used very successfully for collaborative work with manufacturers and software agencies. This work has provided a wide range of hardware and software products for use in education, commerce and industry and has considerable benefits for the university, polytechnic or college. There may often be provision of test equipment, consultancy fees to the department and/or staff concerned, and the provision of staff, or their funding, by the sponsoring organization. In most cases the work provides interesting opportunities for all involved.

What of the future? As the demand for computers (particularly minis and groups of micros) within individual colleges grows it will be interesting to see how the central computer services can coordinate and respond to specific departmental requirements. At present, computer centres in polytechnics and colleges are losing one identity - as a purveyor of mainframe hardware and software - and striving for a new one - as professional advisers and providers of a total computing resource for learning, research and administration. The appropriate hardware, software and staff will need to be planned and provided to meet, continually in both volume and variety, Mainframes, minicomputers, microcomputers, networks, rings and links all have a vital role in these developments.

Software is becoming the costly part of computing and may increasingly dictate the best mode of meeting the educational needs. Mainframe software available to all, multiple micro-licenses, and dedicated single-function minicomputers will all have their place and will require up-to-date knowledge and expertise to deploy the whole range of hardware and software effectively to meet the growing and widening resource demands, and within financial constraints, however well, continue to make efficient planning and provision essential.

creasing cost will certainly bring rings of micros dedicated to handling specific types of work (function processors). In education this may mean one handling FORTRAN jobs, another PASCAL and a third dealing with COBAL work. Applications packages may similarly have a dedicated processor. Users could then access any or all by the communications ring.

Learning resources centres involving some of the work of present libraries, computer centres and visual aids units are already beginning to emerge. Technical advances such as

Prestel already have "computer ground" in libraries and computer centres; and the siting of computers, terminals, microfilm, video cassette facilities, and the normal library accommodation may often make all these resources more readily available to staff and students.

**D. M. Melluish**

*D. M. Melluish is head of computing services unit at North Staffordshire Polytechnic.*

## A failure to turn the key?

Had this article been written five years ago, it would have been necessary to start with a description of computer-based learning (CBL). We would have made the distinction between CBL - learning with the aid of the computer - and computer appreciation or computer science - learning about the computer; and we would have discussed various ways in which CBL can be used to provide drill and practice, modelling, assistance, simulation and, modelling, support with calculations, learning, and help with the management of learning. Although CBL has been shown to be a useful technique for learning some things in higher education, and despite a greater availability of computer hardware, we have not seen the dramatic expansion of its use that some people were forecasting five years ago.

Spectacular changes in educational technology can be charted by innovations and pieces of hardware which showed great promise and of which people had great expectations, but which never properly fulfilled our hopes for them. Film projectors, teaching machines, and other devices were hailed as the answer to all our cupboards - and the gathering dust in should be different for two reasons. First, unlike all the other hardware that has the ability to control, both itself and other equipment. Second, we must take account of the tremendous pressure exerted by the media, which persuades us that microelectronics and information technology are the key to our future and urges us to learn how to use them. So where are we falling with this innovation? Or are we expecting too much of CBL, so that our apparent disappointment is due to unrealistic expectations? What can be done to improve matters?

The modern history of CBL in Britain starts with the five-year Computer Assisted Learning Programme in December 1977. It left a legacy of continuing projects in 32 institutions, 22 of which were in tertiary education. In particular, it established a number of groups whose members cooperate in the development and exchange of CBL

materials. The three higher education groups, the Engineering Program Exchange (EPE), CALCHEM (CAL in Chemistry) and the Central Association and the Central Ram Exchange, are still active, although their existence is threatened by uncertain financial support. Following the end of the National Development Programme, these projects consolidated their positions to move into the current position of austerity and there was little room for new development. Things were further complicated because it is not clear just who should be providing funding for CBL. The main funding initiatives of the Engineering Education Programme and the Scottish Microelectronics Development Programme are established, they were aimed at the more pressing needs of industry and primary education. Higher education, which had been favoured by the National Development Programme, was largely excluded from the exception of activities directed towards teacher education. This decision can be justified by continuing lack of funding for computer-based learning in higher education has led to some serious problems.

Without resources for continuing new activity in CBL, the only lessened, but has also become fragmented. Although many are interested in the technique and find it with their students, they find it difficult to control, and to cooperate with, colleagues in other institutions. Thus, they tend to work in isolation, without the benefits of group consultation and coordination which could be so valuable. An even greater problem is the lack of resources, both in the college and from outside, for the lecturers in the knowledge and skills needed to make effective use of CBL. Clearly this is not a problem for lecturers in higher education. CBL: the development of higher education skills for lecturers in higher education is a grossly neglected area, such training is a particularly important component in an innovation programme influencing the development of CBL.

need for all lecturers to have the same basic awareness of the strengths and weaknesses of CBL as they now have for, say, the overhead projector or video. One strategy which has proved successful in practice, draws an analogy between our use of CBL and of textbooks. Few lecturers, faced with the need for a course text would immediately sit down and write their own. Instead we look around for what is available, evaluate inspection copies, and then try the one that looks the most promising. We may experiment a little to discover the best way of using it to meet the needs of the course. Eventually there may come a time when we feel that we could do better. Then, if we decide to write our own book, we can draw on our experience of using others and learning from their shortcomings. In many subjects, particularly in science, engineering and

# COMPUTERS IN HIGHER EDUCATION

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CBL are complex, but must include some way of disseminating information about what is available and how it may be used. If there is no provision for lecturer training, then an important channel of communication is closed. We must rely instead on the literature and on personal contacts. Unfortunately, these personal contacts are difficult when CBL in higher education is largely uncoordinated and fragmented.

It is ironic that lack of resources can impede an innovation which, properly used, can help us to make better use of those resources we do have. The appropriate use of educational technology can help to improve the effectiveness and efficiency of higher education, and in some cases can lead to cost savings on capital equipment and other consumables. For example, computer-based simulations are being used to complement laboratory work in spectroscopy in an undergraduate chemistry course; as a result, the department has not needed to replace a number of spectrometers. The savings far outweighed the cost of acquiring the CBL materials and making two computer terminals available for the students. Other simulations, combined with video and other materials, could reduce the length and thus the high cost, of geology field trips. Such savings could be used to offset cuts in more sensitive areas, such as staff salaries. Perhaps CBL, far from replacing the teacher as many feared in the past, will in fact help to preserve jobs.

As well as providing a different way of learning things, CBL provides a way of learning different things. It makes it possible to give students learning experiences which would otherwise be impractical for reasons of cost, time, difficulty or danger. Good CBL materials can lead to the quality of academic life by making the tedious aspects and intruding the interesting and stimulating experiences. The key is to have good materials. Unfortunately, although there is a considerable amount of material available, much of it is less than ideal in terms of presentation, its support, its educational content or its relevance.

The CBL packages developed for higher education under the aegis of the National Development Programme were designed to run on the time-sharing computers of the day, and do not take advantage of the improved graphics and colour displays which are available on contemporary microcomputers. They lack what when compared with some of the packages which have been developed more recently for use in secondary education. The learning style of the secondary materials, however, is unsuitable for higher education, where the emphasis is on analysis, problem solving and originality, and so lecturers often perceive these packages as trivial and irrelevant. The lack of interest in CBL cannot be laid entirely at the door of the funding agencies; those working in the field must produce good examples of CBL for higher education, making use of artificial intelligence techniques to make analysis and problem solving. These can then be used as credible demonstrations in support of the innovation.

The most important task is to help others in higher education to make informed decisions about whether, when and how to use CBL in their teaching. It is not only unrealistic to aim for the wholesale use of CBL in this way; it is also most undesirable. In the same way that we should not contemplate the total replacement of lectures by video, tape or other technology, we should aim for a total replacement by CBL. A considerable amount of effort has been done in the past as a result of uncritical euphoria. The medium is inappropriate use of the computer as the sole method of teaching. When these courses are abandoned, the ideas of CBL are discredited. This brings us back to the problems of training and the

business studies, there is a sufficient quantity of CBL material already available to use this innovation strategy effectively. Other subjects are catching up, albeit rather slowly.

One part of the analogy has still to be developed for higher education materials. Although textbook publishers are starting to take an interest in publishing CBL packages for primary and secondary education, relatively little tertiary level material has been commercially published. For the time being we must look to the existing program exchanges and to our colleagues in other institutions for packages which already exist that we can import into our own classes.

**N. J. Rushby**

*N. J. Rushby is Director of the CEDAR Project at Imperial College, London.*

## From catalogue to fiche

Three factors have dominated university librarianship since 1960: the information explosion, apparently uncontrollable, the student explosion, now being controlled by external forces, and automation, a way, perhaps, to regain control of the others.

Most libraries now use computer-aided systems in the basic library "housekeeping" tasks (acquisition, cataloguing, circulation; only the daily check-in of periodicals parts has resisted automation). The early stages of automation were an absorbing, if stressful, period: library staff were easier to get at than the Gas Board when things go wrong. The usual signs of a dynamic subject appeared: special interest groups and conferences, new journals, and even, for some years, a flourishing invisible college.

Those involved reported that their work (especially if it attracted a substantial research grant) led to a marked rise in status within the university, reducing the traditional attitude of amused tolerance towards a librarian's absorption in the minutiae of his craft. Lecturers even stopped ignoring the offers of, truly needed, training in how to use catalogues, abstracts and other tools for tracking down items, and sought instruction on how the system worked, and, in extreme cases, forced it on their students by instituting compulsory courses in information retrieval, taught and marked by the library staff. (Students need this training to keep up-to-date during their professional careers.)

The early systems worked, without being ideal. They were a necessary prelude to the better systems libraries hope to introduce during the eighties. Most ran on university research computers, which were not designed to cope with the large files that library systems require. An artificial intelligence technique to make analysis and problem solving. These can then be used as credible demonstrations in support of the innovation.

The fall in hardware costs, especially disc storage, has allowed some libraries to buy their own computer, with a library-oriented specification,

and so to design systems that integrate the different library housekeeping tasks and, of course, operate on-line. As many of the early systems were set up in isolation, with no thought that they would one day have to link through the computer to other systems, or even to systems in other libraries, the changeover involves re-designing many pioneer systems.

Two factors from this development period will continue to affect the future pattern of library services. Automation of the British National Bibliography (BNB), now produced by the British Library Bibliographical Services Division - BLBSD, by accepting and standardizing the Library of Congress MARC (MACHIne Readable Cataloguing) format, largely stopped the development of a variety of formats for machine-readable bibliographic records, which might have prevented the exchange of data between libraries. BLBSD now produces a Local Cataloguing Service (LOCAS), for libraries lacking access to a suitable computer.

The other factor was the formation, from 1970 on, of library co-operatives, first in Birmingham (BLCMP) and then in Bristol (SWALCAP), Scotland (SCOLCAP), the London and South-East Region (LASER), primarily for public libraries, and among the libraries

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of London University. Although it takes longer to develop an automated system for a group of libraries, the average costs are lower, better computer facilities can be justified, and other expenses can be shared. For instance, where all members have access to each other's catalogues, inter-library loans can be speeded, and the purchase of expensive items rationalized. All the co-operatives draw data from the BLBSD MARC files, as well as adding Extra-MARC material (EMMA) to the common stock. Membership has increased rapidly, and probably most libraries will either use LOCAS or eventually join a cooperative. Even so, no British cooperative can match in size the American ones, and of these OCLC, with well over 1,000 American members, is now recruiting members in Europe from a base in Birmingham.

The larger libraries still have manual records for most of their catalogues. BNB records go back only to 1950, but retrospective conversion of earlier catalogue records is well under way, both locally and in the British Library. Libraries which have coped with this by freezing the card catalogue and starting a new automated microform catalogue recognize that the best is a disadvantage, but hope to convert the whole file when bibliographic data is available.

Automation, then, allows libraries to offer their traditional services to the academic community, but more efficiently and with fewer staff. The next stage in this housekeeping automation will enhance the services now offered by allowing access to the catalogues, not merely after output from the computer, but on-line. Most universities have a network of terminals scattered around the campus and linked to a central computer service. If the library uses the same computer, or has its own computer within the network, any reader will be able to look for a book or journal, and check whether it is in stock, on order, at binding, or on loan, and then either place an order for its purchase, reserve it or request from loan, or request an inter-library loan (ILL); by that time the ILL office will be on-line to the British Library Lending Division (BLLD), as well as to the central computer of a cooperative. A service like this still requires some years of work, but the way ahead seems clear.

Moreover, because computers can keep statistics of every transaction, librarians will be able to adapt their services to changes in demand, buying extra copies or reducing the loan period for books in heavy use, and reducing stocks for apparently superseded material. It is much easier to alter computer records en bloc than to change all the entries in a card catalogue. Keeping such records is not without its dangers. Any reader is as entitled to privacy in his choice of reading matter as in anything else. Abroad, the police have been known to check issue records to see who is studying subversive literature.

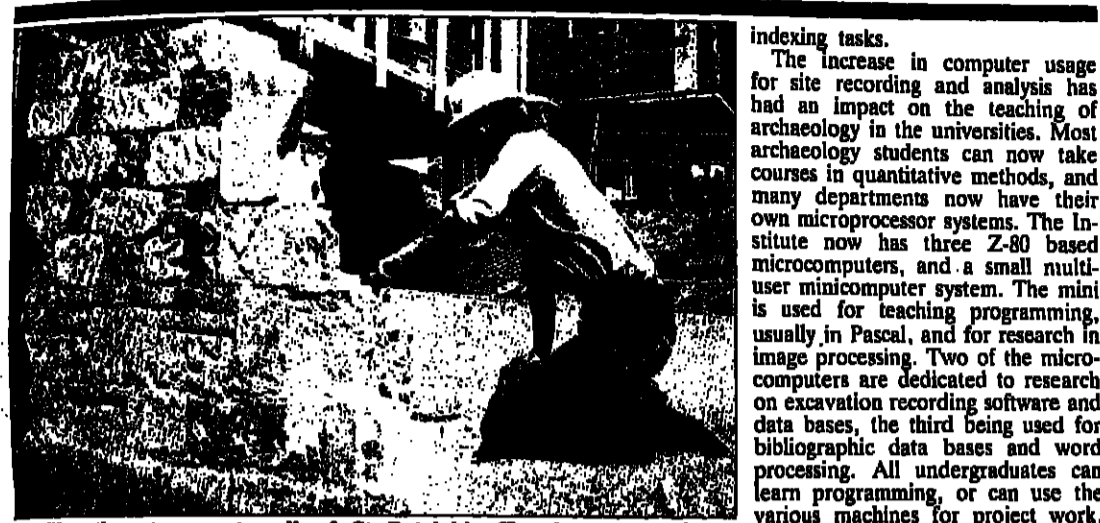
Housekeeping systems, however, are not everything, even to librarians, and great changes in the methods of information supply and transfer are expected during the next few years. Again, the base will be work done since 1960. The traditional abstracting services could not keep up with the information explosion, but the development of computers, and then of computer typesetting, offered a better method of compiling, and especially of indexing, the articles. For the past 20 years, abstracting services have been accumulating files of indexed abstracts, some now containing millions of records. At the same time, research institutions and commercial companies were building up similar files for their members and staff. The index files were usually based on a thesaurus, and the file could be searched using one or more terms as the key. It provided a much faster way of compiling lists of references, or of searching that none were overlooked. This manual searching, even when the searches were made in batches and the results as computer print-

out, sent by post. In 1980, 20 million references were available from hundreds of data bases; by now the total may have doubled. The service is international; two of the services most used by British researchers, Lockheed and the European Space Agency, are based in America and Italy respectively. A standard visual display unit allows on-line access to the information suppliers, who have developed specialized software to help the user formulate a research strategy. Relevant references on the screen can be transferred to a printer running in parallel. Most data bases cover the sciences, engineering and medicine, although social scientists, lawyers, etc., are also catered for. The present system has two weaknesses. What is supplied from a bibliographic data base is not information, but references to its existence and location; the actual texts may have to be sent from BLBD. Furthermore, the information suppliers, to recoup the high costs of compiling, storing and accessing the data, charge for "connect time", and add a royalty for each reference printed out, on-line or off-line, a charge not made for other library services, and beyond the means of others, who risk becoming second-class citizens as a result. Even so, many university libraries now employ an information officer to help researchers with their problems (badly chosen search terms can double the connect time and produce pages of misleading references), and to train students in the transferred from the end-user to an intermediary and a machine, a fact not always appreciated.

More recently, source, or numeric, databases have been compiled, which contain, not references, but actual data, mostly numeric. More powerful computers, and more sophisticated search methods, are making it possible to search full text databases for any key words or combinations, instead of those in the thesaurus, and to reproduce occurrences of the words in their contexts. Although this improves the speed of access to information, the cost remains high. However, hardware costs continue to fall, and thanks to the use of word processors and computer composition in the preparation of many journals and reports, it is always the most difficult items to trace and collect - machine-readable versions of many texts already exist, as do networks for the transfer of information.

Nor is a dedicated computer terminal the only means of access. Any television set adapted to receive broadcast information through Ceefax and Oracle, and over telephone lines through Prestel, makes a home, office or workshop an information centre. The new Gateway system on Prestel will allow access to any computer in the network. Although much of the information is ephemeral or non-academic, replacing the *Radio Times* or the *Financial Times* share index rather than *Chemical Abstracts*, Prestel sets may appear in most academic libraries before long, probably with a coin-operated mechanism to cover the telephone charges. If all journal articles, and reports are available from a computer store, need they ever be printed? A completely "paperless society", though forecast, does not seem likely. No portable screen has yet been made that can be moved from desk to desk. It is not clear how a computer store is needed to hold even a small reference work. Many books in a university library are objects of study rather than simple sources of data. However, many journal articles are read by very few people, and providing current standards of refereeing may be maintained. It is probable that other forms of primary communication will be available in electronic form in the first instance, and printed only on demand. Tentative ideas might also be put into a computer network, to be circulated, distributed, amended and developed. This would suit all kinds of research - certainly nothing with commercial potentials - but it would ex-

## COMPUTERS IN HIGHER EDUCATION



The fifteenth-century east wall of St Botolph's Church currently being excavated in the lorry park of Billingsgate fish market. Note the chequered bedding technique of alternating blocks of chalk and flint familiar in East Anglian churches but only occasionally found in London. The gashes are later additions for keying in plaster. Members of the department of urban archaeology at the Museum of London eventually hope to unravel the changes in the church's superstructure since its Saxon foundations.

### Analysis of finds from archaeological sites

There are two main strands to the use of computers in archaeology: the recording and analysis of data during excavation and the publishing process that follows, and for statistical analysis in research. The latter function is one that is mainly carried out in the universities, using the very large computing power that has traditionally been provided to support the sciences.

Most sites in this country are dug out not by the universities but by excavation units. These units may be independent, or attached to local authorities, but are principally funded by the Department of the Environment, and often have links with local universities. The small size of the sites makes it impossible for them to afford large-scale computers, although some have experimented with recording on local authority computers. However, this has generally not been very successful, mostly because the requirements of excavation recording are very different from those of the normal functions of local authority machines.

The significant decline in the cost of microcomputers during the past few years, bringing them within the reach of even small units, has led to a rapid increase in the number of recording. The Institute of Archaeology in London has been involved in site recording work since 1976, when it was able to purchase its first microcomputer system with a grant from the British Library. Since then, in-house data entry and checking programs for use on site, and data analysis programs based on data base management packages, have been written.

It has taken some time for standards for software and hardware to develop, to allow sharing of programs and data among excavators. The standardization process has been helped by the emergence of CP/M, the most common operating system for microcomputers. Although far from a perfect system, CP/M is satisfactory for the simple applications of archaeology, and has resulted in the wide availability of a great variety of cheap software. This in turn has helped the development of software for archaeological applications.

The amount of data from an excavation may be very large. In our period site, material from a multi-level site, excavated in Essex, was recorded over 100,000 flints, 10,000 pieces of pottery and 1,000 pieces of bone. The total size of the database is now about 2.1 megabytes. Luckily the past couple of years have seen the development of the small "hard" or Winchester technology disk drive. Now it is common for microcomputers to have 5 or 10 megabytes of disk storage on the machine. The speed of data base management programs much

swifter and more efficient. For very large sites a single microcomputer may not be sufficient, and it is necessary to use several microcomputers or a system of micro-minicomputers. A good example is the Billingsgate site, at present being excavated by the Museum of London. This excavation is below the lorry park of the old Billingsgate fish market and, with luck, should reveal traces of the Saxon waterfront of the Thames. Urban excavations tend to be quite complex, and Billingsgate is expected to reveal about 15,000 archaeological layers and about 20,000 individual finds. Each layer must have an outline plan recorded, with its stratigraphic relationships to other layers. Each find is related to its layer and has dating and other relevant information stored. To deal with this data entry and storage problem a system of five Z-80 based microcomputers and a minicomputer has been built up. Information is recorded in the site hut, on finds and on the contexts. The outline plan of each layer is digitized and stored, with the microcomputer automatically locating layers around it. When the finds are deemed and examined in greater detail in the Museum more information is recorded, also on the microcomputers. The data are then transferred to the minicomputer on floppy disks. The mini is PDP 11/23 which runs Unix, a multi-user operating system capable of supporting about six users on a machine of this size. It has, however, 96 megabytes of disk storage, which should allow all of the information on the site to be kept on-line simultaneously. As the excavation progresses, summaries of each day or week's work are sent back to the excavators, enabling them to keep continuous track of the stratigraphy, and simplifying the eventual task of publishing the excavation.

One of the results of an excavation is a museum full of finds, which must be catalogued. Some years ago, museums in Britain joined together to form the Museums Documentation Association (MDA), with the intention of developing methods for computer cataloguing of museum items. The MDA has written an indexing and cataloguing package called GOS, which now runs on several large-scale computers and a minicomputer. Although this is a large package, which makes heavy demands on the computer on which it runs, it has now been successfully transferred on to microcomputers. Although a version has been adapted for Z-80 based machines, it is probable that it will run much better on a 16-bit processor such as the Motorola 68000. It is possible then to imagine hardware and software packages that are within the budget of a small museum, but capable of efficiently carrying out all the cataloguing and

### The AudioVisual Library of Computer Education



"COMPUTER EDUCATION IS THE CHALLENGE OF THE '80s." At least a comprehensive, audio visual introduction to computers which explores all aspects from microcomputers to mainframes. Using practical and commonsense examples throughout, the materials are suitable for secondary school, college and university levels as well as for trainees in commerce and management. The series provides a solid framework for examination study, a computer appreciation course, or a ready reference for review.

There's even a four-part 'starter' course on BASIC! The fifteen titles in the series, available as Tape/Filmstrips, Tape/Slides and in all Videocassette formats, are as follows: The Computer Introduction to Programming Understading Computers BASIC One The Micro Revolution BASIC Two The Silicon Chip BASIC Three Input and Output Units BASIC Four Computer Terminals Secondary Storage The Central Processor Computer Numbers free catalogue and full details from: Primatech Productions 9 Gloucester Crescent London NW1 7DS England

### Positron 9000 microcomputer

- Multi-user system - up to four extra terminals can plug straight in. High and low resolution graphics can be mixed for powerful visual displays. Powerful - basic machine has 64K RAM and 38K ROM as standard - expansion to 256K RAM and 64K ROM by simply plugging in more chips. 7 colour graphics for attractive eye-catching pictures. OS-9 operating system to support multi-user system supplied as standard, for multi-programming, type-ahead facilities and supporting several high-level languages. BASIC OS language - easily understood and easily debugged - supplied as standard. Wide range of accessories, including hard and floppy disks, printers, monitors, terminals. Write for further details. GRIFFIN AND GEORGE EALING ROAD WEMBLEY HA0 1HJ

Ian Graham is lecturer in quantitative methods at the Institute of Archaeology, London.

## GUILD COMPUTING SERIES

Now available from Guild Learning

**BASIC: AN INTRODUCTION TO COMPUTER PROGRAMMING** A complete course in BASIC programming designed to be used in education. Consists of four video cassettes, a teacher's manual and a set of student Exercise Sheets which may be copied. The course is structured in short step-by-step sections and is suitable for use with any computer capable of using BASIC. **WORD PROCESSING** A two-part video introduction: 'What's it all about': a general introduction to word processing and its applications. 'Making it Work': a video cassette programme to help train typists and clerical trainees. Supported by a Teacher's Manual with exercises. For full details (including details of special discount rates to education) contact: **GUILD LEARNING** Guild Sound & Vision Ltd Guild House Qundle Road Peterborough PE2 9PZ Tel: (0733) 63122 Telex: 32659

**PROGRAMMING IN PASCAL 1982** A full video course in sixteen 30 minute parts. The course assumes no previous knowledge of computing and enables both those with some programming experience and beginners to understand and practice programming in PASCAL. **COMPUTER BASED INFORMATION SYSTEMS** (Open University course M352) A collection of eight video programmes showing how large quantities of data are handled. Using a Case Study approach the course covers data-bases, their construction, organisation, management, operation and uses.







Polytechnics continued

The Polytechnic of North London

Applications are invited for the following posts, each tenable from 1st September, 1982, or as soon as possible thereafter.

FACULTY OF ECONOMIC AND ADMINISTRATIVE STUDIES LECTURER II IN ECONOMICS

To teach on a range of courses, largely concerned with the application of economic analysis to business problems. Applicants should possess a good honours degree in economics or a related subject and a relevant postgraduate qualification. They should also have an interest in managerial/business economics, and preferably in the economics of multinational enterprises.

FACULTY OF SCIENCE AND TECHNOLOGY LECTURER II IN MATHEMATICS

To teach Mathematics at all levels within the department and, in particular, to contribute to the further development of courses linking Mathematics and Computing, and to research in this area. A special interest in Finite Mathematics and its applications to Computer Science is therefore considered highly desirable. Applicants should have a strong background in Mathematics and relevant research or industrial experience.

FACULTY OF SOCIAL STUDIES LECTURER II/SENIOR LECTURER IN SOCIAL WORK (2 posts)

To teach across a range of courses within the School. Applicants should be professionally qualified social workers, graduates, with at least 2 years post-qualifying practice, at least one of the people appointed will hold a social science degree. We are seeking candidates with a particular interest and competence in the field of mental health and in addition on or more of the following areas: Social work in a multi-racial society, old age and disability, groupwork, community work. Knowledge of and experience of working with ethnic minority communities will be a considerable advantage.

TEMPORARY LECTURER II/ SENIOR LECTURER - DISTRICT NURSE TUTOR

Applications are invited from holders of the District Nurse Tutors Certificate to join the present course tutor in expanding and developing District Nurse education and training. The post is being funded by a group for 8 Health Districts for an initial period of 3 years. Informal enquiries are welcome, please contact Margaret Cottrill, Tel: 01-807 276 ext. 5338.

LECTURER II (Department of Law)

To teach primarily on BA (Hons) Law and BA (Hons) Modern Studies. Candidates must be prepared to offer at least two years' teaching experience in Social Welfare Law would also be an advantage. Suitable qualifications would be a good first degree in Law conferred by a British University or the CIAA together with a higher degree and/or professional qualification, but candidates holding a non-law degree and a postgraduate qualification in law would also be considered.

SALARY SCALES: Senior Lecturer: £10,288 - £12,087 (Bar) - £12,900. Lecturer II: £7,221 - £11,150.

(Staff at the top of the Lecturer Grade II scale can expect progression to the Senior Lecturer Scale subject to satisfactory efficiency requirements.) Application form and further particulars (please state post in which interested) can be obtained from The Establishment Officer, The Polytechnic of North London, Hainbury Road, London N7 8DB. Closing date for the receipt of applications 14 days from the appearance of this advertisement.

TESSIDE POLYTECHNIC Department of Civil & Structural Engineering and Building

Lecturer II/ Senior Lecturer in Civil Engineering

Applications are invited from candidates with individual research and/or teaching experience in the fields of Structural Engineering and Building. Whilst no specific areas of research are specified, it is anticipated that preference will be given to candidates who can offer Structural Design. An interest in Computing would be an advantage. Teaching may be at HC, HD, undergraduate and postgraduate level. Research will be encouraged in the area of the lecturer's interest.

Salary: £6,482 - £9,084 (full-time) £4,114 - £5,128 (part-time) £12,141 per annum. An appointment will be made within the Lecturer II band of the scale.

Application forms and further particulars are available from the Personnel Section, Tesside Polytechnic, Borough Road, Middlesbrough, Cleveland TS1 3BA. Telephone: Middlesbrough (0942) 218111, Ext. 4114. Closing date for applications: 30th July, 1982.

LONDON POLYTECHNIC LECTURER IN INTERIOR DESIGN

To teach 3/4 days a week on the BA (Hons) Interior Design and the recently approved MA in Interior Design. A postgraduate degree in architecture or a similar discipline, combined with professional practice, is required.

LECTURER IN FASHION To teach 3/4 days a week on the BA (Hons) Fashion course. Essential requirements are a first degree in fashion design, combined with professional practice, is required.

Salary scale for the above posts is £6,555 - £11,625 (full-time) £4,114 - £5,128 (part-time) £12,141 per annum. An appointment will be made within the Lecturer II band of the scale.

Application forms and further particulars are available from the Personnel Section, Tesside Polytechnic, Borough Road, Middlesbrough, Cleveland TS1 3BA. Telephone: Middlesbrough (0942) 218111, Ext. 4114. Closing date for applications: 30th July, 1982.

DEPARTMENT OF INDUSTRIAL AND PRODUCTION ENGINEERING PRINCIPAL LECTURER IN THE DESIGN AND ORGANISATION OF MANUFACTURING SYSTEMS (COMPUTER APPLICATIONS)

To undertake teaching and research in the above disciplines and to administer and act as Course Tutor for the Enhanced Engineering Degree course within the Department. Specialism in the application of computers to production scheduling or facility design and layout, or production simulation and optimisation studies, or computer-aided manufacturing would be a particular advantage.

DEPARTMENT OF FASHION AND TEXTILES LECTURER GRADE II/ SENIOR LECTURER IN GARMENT PATTERN CUTTING AND CONSTRUCTION

A forward looking, progressive pattern cutter is required to work with the BA Honours Courses in Fashion Design and Knitwear Design.

DEPARTMENT OF SURVEYING LECTURER GRADE II/ SENIOR LECTURER IN ESTATE MANAGEMENT

Applicants will be required to take part in teaching on the sandwich degree and part-time courses. Corporate Membership of The Royal Institution of Chartered Surveyors, supported by appropriate industrial or professional experience is essential.

Salary Scales: Principal Lecturer £11,931-£15,018. Lecturer Grade II/ Senior Lecturer £8,855-£12,816.

Further details and form of application available from The Assistant Director (Administration), Trent Polytechnic, Burton Street, Nottingham NG1 4BU. Forms to be returned as soon as possible.

TRENT POLYTECHNIC NOTTINGHAM

Middlesex Polytechnic

Lecturer in German Business Language and Management

To teach German business language and an aspect of business studies or management. Applicants must be native speakers or bilingual and have qualifications in and experience of teaching German business language. Experience of working in German industry or commerce and/or qualifications in some aspect of business studies or management are expected.

Lecturer in Mathematical Education

(Temporary three-year appointment) To deal with mathematical and computer studies sections of the mathematical syllabus, and to introduce computer education to students not specialising in mathematics, on courses of initial and in-service teacher education. Applicants should be graduate mathematicians with recent experience of secondary school work.

Lecturer in Educational Psychology

(Temporary three-year appointment) To teach across a range of education courses. Applicants should be educational psychologists with a knowledge of teaching German business language. Interest in language and reading would be welcomed.

Salary scales for the above posts: Lecturer (Senior Lecturer): £8,855-£12,816 p.a. Principal Lecturer: £11,931-£15,018 p.a. Good academic qualifications, degree teaching experience and the ability to initiate and conduct research will be expected at appointment at PL level. While quoting ref A272A for further information and an application form, please send to: Personnel Office, Middlesex Polytechnic, 114 Chispa Side, London N14 6PN. Closing date: July 8.

Middlesex Polytechnic

Reader in Organisation and Management

Responsibilities will include teaching on the MA in Business Management, the supervision of MPhil and PhD students, seeking external funding, and developing applied research.

Candidates must have a proven record of teaching, research and publications in organisation theory and organisational research methodology, with a strong emphasis on applications to the management process. While quoting ref A277A for further details and an application form, please send to: Personnel Office, Middlesex Polytechnic, 114 Chispa Side, London N14 6PN. Closing date: July 8.

RESEARCH ASSISTANT/ DEMONSTRATORS

Good honours graduates desirous of working for a higher degree are invited to apply for three year full time research appointments in respect of the following projects:

Department of Literature, Languages and Philosophy. Discourse as a means of control in asymmetrical contexts (Ref: E137).

Department of Mathematics, Statistics and Operational Research. Algebraic theory of multi-dimensional linear multivariable control systems (Ref: E138).

Note: Previous knowledge of relevant aspects of the mathematical theory of control would be an advantage but not a necessity.

Department of School Technology, Craft and Design. Design and Technological Activities in the School Curriculum and their influence on technological career choice (Ref: E129).

Department of Social Studies. A Pilot Study of Pre-Service Medical Board Records (Ref: E127).

Further details and forms of application available from The Assistant Director (Administration), Trent Polytechnic, Burton Street, Nottingham NG1 4BU. Forms to be returned as soon as possible.

TRENT POLYTECHNIC NOTTINGHAM

SENIOR LECTURER 'A' IN CONSUMER AFFAIRS

(Post Ref: 82/05RR) £11,139(x3)-£12,389(Bar)(x4)-£14,079

Applications are invited for the above post which is primarily concerned with the further development of the SHND Course in Consumer and Business Studies. The post also involves responsibility for the work of the College Consumer Advisory Centre. Appropriate opportunities are available for research, consultancy and personal development.

Further particulars and application forms are available from: The Secretary and Treasurer (Staffing), at the undernoted address, or telephone 041 334 5141 Ext. 27. The Closing date for this post is Monday 20th September, 1982.

THE QUEEN'S COLLEGE GLASGOW

1 Park Drive, Glasgow, G3 6LP. Tel: 041-334 8141. A Scottish Central Institution.

LONDON

PRINCIPAL LECTURER TRANSPORT ECONOMICS AND POLICY £19,000 p.a. - £25,000 p.a. CITY OF LONDON POLYTECHNIC

The prime responsibility attached to the post is overall supervision of the Transport Policy in the Business Studies course. This will include academic teaching of students on the four year course.

Applicants must hold a good degree with relevant teaching experience. Candidates should be prepared to accept some of the following duties: to advise on the development of transport studies in the transport department; to advise on the development of CMAA courses in transport studies; to advise on the development of research results; to advise on the development of transport studies in the transport department.

Conditions of service are essentially similar to those of other senior staff employed directly by H.E.A.

Salary scale: £19,000 p.a. - £25,000 p.a. (£14,991 p.a. (under review)). For further details and an application form please write to: Personnel Office, City of London Polytechnic, 100 Broad Street, London EC2A 4DP. Closing date: July 1982.

LONDON POLYTECHNIC OF THE BOROUGH ROAD, ENFIELD. SENIOR LECTURER IN LAW

Discharge of Law and Government (School of Law)

This small specialised school requires the services of a senior lecturer in the teaching of Law. It is intended to appoint a person with proven academic and professional qualifications who is willing to contribute to the school's development. An interest in law and/or a postgraduate qualification in law is an advantage. The post involves the teaching of Law and Government (School of Law).

Salary in the range £11,931 - £15,018 p.a. (under review). Further particulars and application forms are available from: The Assistant Director (Staffing), at the undernoted address, or telephone 041 334 5141 Ext. 27. The Closing date for this post is Monday 20th September, 1982.

For further details and an application form please write to: Personnel Office, City of London Polytechnic, 100 Broad Street, London EC2A 4DP. Closing date: July 1982.

Polytechnics continued

KINGSTON POLYTECHNIC School of Teacher Education & Music

SENIOR LECTURER IN THE TEACHING OF SCIENCE (Primary) SENIOR LECTURER/LECTURER II IN THE TEACHING OF MATHEMATICS (Primary)

Applications are invited for the above positions from well-qualified teachers with varied experience including primary or middle schools work and possibly teacher education/ advisory work. For the science post, applicants should have a background in physical science. Salary ranges: Senior Lecturer £9,624-£12,141. Lecturer II/Senior Lecturer £6,482-£12,141. London allowance £498. Please send large SAE (minimum 8 1/2 x 6 1/4) for details and application forms to Academic Registry, Dept. AD/TEM, Kingston Polytechnic, Penrhyn Road, Kingston upon Thames KT2 2EE. Closing date: 12th July 1982.

MANCHESTER POLYTECHNIC DEPARTMENT OF MATHEMATICS AND STATISTICS LECTURER IN MATHEMATICS

Required for September 1982 a temporary one-year full-time appointment in Mathematics. Candidates should have an active research interest in any of the following areas: Algebraic theory of multi-dimensional linear multivariable control systems; Algebraic theory of multi-dimensional linear multivariable control systems; Algebraic theory of multi-dimensional linear multivariable control systems.

For further particulars and application form (to be returned by post) please write to: The Assistant Director (Staffing), at the undernoted address, or telephone 041 334 5141 Ext. 27. The Closing date for this post is Monday 20th September, 1982.

Colleges and Institutes of Technology

GLASGOW COLLEGE OF TECHNOLOGY

Glasgow College of Technology, a Polytechnic Institution of H.E., invites applications for the following posts:

RESEARCH ASSISTANTS (6 POSTS)

Candidates must normally be in possession of an honours degree or equivalent qualification. Research Assistants will normally be expected to register for a higher degree by research. Applications are particularly invited for research in the following topics:

- 1. INFORMATION SYSTEMS DESIGN: DATA BASE SOFTWARE. 2. HUMAN CORNEA RESPONSE TO STRESS ENVIRONMENTS. 3. BINOCULAR FUNCTION ACCOMMODATION. 4. ENZYME-CHEMICAL CARCINOGENS ACTIVATION. 5. PRE-SCHOOL CHILD CARE: PARENTS AND WORK. 6. AMORPHOUS MIXED METAL OXIDES. 7. MAGNETIC PROPERTIES OF ASBESTOS AND OTHER AIRBORNE CONTAMINANTS. 8. ASPECTS OF DRY FUEL STORAGE. 9. FLUID MECHANICS OF PIPELINE FLOW AND HEAT EXCHANGERS. 10. LIQUID CRYSTAL PROPERTIES AND DEVICES. 11. ELECTRICAL INSULATION AND BREAKDOWN. 12. BUSINESS MODELLING. 13. HEALTH VISITORS: FAMILIES AT RISK.

Salary Scale £2667 - £4449

RESEARCH FELLOWSHIP: LIQUID CRYSTAL PROPERTIES AND DEVICES

Candidates should have or expect to have a PhD in an appropriate area. Salary £7958 - £8598.

Application forms from the Establishments Officer, Glasgow College of Technology, Cowcaddens Road, Glasgow G4 0BA. (Phone: 041-332 7080), to whom applications should be returned within 14 days of the appearance of this advertisement.

PAISLEY COLLEGE

TEMPORARY LECTURESHIP IN SOCIOLOGY

A temporary one-year Lectureship in Sociology in the Department of Politics and Sociology is available from September 1st, 1982. Applicants should be able to contribute to teaching in introductory Sociology, and have a specialist interest in Urban Sociology and/or 19th century industrial and Political Development.

Salary £7956 p.a. Application forms and further particulars are available from the Personnel Office, Paisley College of Technology, High Street, Paisley PA1 2BE (Tel: 041-851-1241 Ext. 230). Closing date for applications: Wednesday 14th July, 1982.

Administration

London Borough of ENFIELD EDUCATION DEPARTMENT

Assistant Education Officer £10,758 - £12,000

Applications are invited from graduates with good teaching experience, preferably in Further Education. The post involves a wide range of duties including involvement in general curriculum development within the Borough and is suitable for teachers wishing to enter administration as well as those already having had some administrative experience in a local education authority. It carries an essential user car allowance and there is a generous scheme of assistance for those who have to move home.

Application forms are available from the Director of Education, PO Box 95, Civic Centre, Silver Street, Enfield EN1 3XL. Tel: 01-826 9366. Closing date: 9 July, 1982. Please quote reference OGD/223.

Department of Education and Science HM INSPECTORS OF SCHOOLS

Further And Higher Education - Engineering

Applications are invited from men and women, preferably aged between 35 and 45 for appointment as HM Inspectors to work mainly in the field of Further and Higher Education. All HM Inspectors undertake general duties, as well as specialist work, and candidates should have, therefore, a demonstrably wider interest in Further and Higher Education and substantial teaching experience.

Applicants must be chartered engineers with a degree in electrical-electronic, mechanical, production or a similar professional sector. Appropriate professional/industrial experience is required. Previous applicants may re-apply. Starting salary, within the range £1846-£1984 (higher in London). Higher posts are filled by promotion.

Application forms (to be returned by 23rd July 1982) and further information may be obtained from Miss J. D. Church, Department of Education and Science, Room 18/17, Elizabeth House, 39 York Road, London SE1 7PH. Tel: 01-928 9222, Ext. 2287 or 2766. Please quote reference 482.

DEPARTMENT OF EDUCATION AND SCIENCE HM INSPECTORS OF SCHOOLS - PSYCHOLOGY

Applications are invited from men and women, preferably aged between 35 and 45 for appointment as HM Inspectors to work mainly in the field of Psychology in teacher education and other Higher Education.

Applicants should be well-qualified in Psychology, with experience of teaching psychology at degree level. A knowledge of schools, and of children with special needs, would be an additional advantage. Starting salary within the range £1846 - £1984 (higher in London). Higher posts are filled by promotion.

Application forms (to be returned by 30th July 1982) and further information may be obtained from Miss J. D. Church, Department of Education and Science, Room 18/17, Elizabeth House, 39 York Road, London, SE1 7PH. Tel: No. 01-928 9222 Ext. 2237 or 2766. Please quote ref. 482.

WINCHESTER KING ALFRED'S COLLEGE LECTURERS IN HISTORY

Applicants are invited for the above posts. Applicants for the first post should have expertise in 20th century American (and, preferably, British) history. For the second post expertise in the field of 18th-19th century English history is sought, with a particular interest in historiography.

Both temporary appointments will start in September 1982 and be for one year. Further details may be obtained from the Principal, King Alfred's College, Winchester, SO23 4JH. The closing date for applications is 5th July, 1982.

Colleges of Further Education

LONDON BALTHAMSTOWN COLLEGE OF HIGHER EDUCATION

Required to teach Law at undergraduate level. Applicants must have a legal qualification in law or employment law would be an advantage.

Salary £11,000 p.a. - £12,000 p.a. per annum (inclusive of London weighting). Closing date for this post: 7 July 1982.

LIVERPOOL INSTITUTE OF HIGHER EDUCATION (Christ's & Notre Dame College and S. Katharine's College)

Applications are invited for the key post of CHIEF ADMINISTRATIVE OFFICER, starting salary in the range £11,220 - £13,884 p.a. (under review).

Further details may be obtained from the Rector, Liverpool Institute of Higher Education, Stand Park Road, Liverpool, L16 9JD.

LONDON HERFORD AND WORCESTER COUNTY COUNCIL

APPOINTMENT OF TWO LECTURERS IN EDUCATION STUDIES

Applications are invited for two temporary (one-year) appointments as Lecturers in Education Studies. The appointments arise from the recruitment of permanent staff.

One appointment will be made from candidates qualified to teach general education in schools (or equivalent) to B.A. (Hons) Education. The other appointment is for a candidate with sound teaching experience in secondary schools and tertiary institutions and qualifications in one or more of the following disciplines: Education, Psychology, Sociology, or other related disciplines. The person appointed will be required to undertake initial teacher training.

The appointments will be made from candidates who have a degree in Education and further qualifications in one or more of the above disciplines. Applications should be sent to: The Director of Education, PO Box 95, Civic Centre, Silver Street, Enfield EN1 3XL. Tel: 01-826 9366. Closing date: 9 July, 1982. Please quote reference OGD/223.

LONDON BUCKINGHAMSHIRE COLLEGE OF HIGHER EDUCATION

Director: Mr. D. J. Cook. COMPUTER CENTRE

Required 1st September 1982 or as soon as possible. The post involves the development of a computer centre for the college. The person appointed will be required to undertake initial teacher training.

Salary scale £6339 - £7878 per annum (inclusive of London weighting). Application forms and further details from the Director of Education, Bucks College of Higher Education, 74 Pitts, Luton, Bedfordshire LU1 1JH. Closing date 8 July 1982.

NORTHAMPTON NENE COLLEGE TECHNOLOGY

Applications are invited for the following post tenable from 1st September 1982. LECTURER (II) in Science and Mathematics. To teach Science and Mathematics subjects on the Technology Course with the ability to contribute to the teaching of Electronics, and Mechanical Engineering.

To teach other Electronics subjects on the Technology Course. To teach other Electronics subjects on the Technology Course. To teach other Electronics subjects on the Technology Course. To teach other Electronics subjects on the Technology Course.



Colleges of Further Education continued

Inner London Education Authority

London College of Printing



Applications are invited for the following Headships which will be vacant with effect from 1 September 1982.

Department of Print Finishing (including Bookbinding and Carton Making) Burnham Grade III, arising from retirement of Mr Cyril Reading.

Department of Science and General Studies Burnham Grade IV, arising from amalgamation of two schools.

Department of Photography, Film and Television Burnham Grade IV, arising from resignation of Mr Adrian Munsey.

The College is a major establishment in the media and communication fields of study and offers courses of study at degree, postgraduate and sub-degree level including BEC, TEC, DATEC, City and Guilds and College Courses.

Further details, particulars and application forms to be returned by Wednesday, 21 July 1982, may be obtained from the Senior Administrative Officer, London College of Printing, Elephant and Castle, London SE1.

Telephone: 01-735 8484, ext. 227.

Adult Education

URWICK MANAGEMENT CENTRE Consultant Tutors Data Processing

The Urwick Management Centre is one of Europe's leading management training establishments. It is the training division of the Urwick Group, providing a wide spectrum of public and in-company management courses in the UK and overseas.

We seek additional consultant tutors to join our expanding team. You will be responsible for designing and leading management development programmes, as well as carrying out consultancy assignments.

Your background must be in data processing; training experience is an advantage, presentational skills are essential. You should be a graduate with significant experience in the use and implementation of computer systems at a senior level in industry or commerce. Your career should include project management, systems analysis and programming. Age late twenties to mid-thirties.

Successful candidates will have the opportunity to develop themselves and have the challenge of developing this key area of our business. Remuneration includes salary, car or car allowance, pension scheme and BUPA. The Urwick Management Centre is at Slough, Berkshire, where you will be based. Appropriate relocation expenses will be paid. There will be some travel in the UK and overseas.

Man and women are invited to write in confidence to Michael Charlesworth giving career details, age and current salary. Please include your telephone number and quote 24817H an envelope and letter.

urwick Urwick, Orr & Partners Limited MANAGEMENT AND SELECTION CONSULTANTS Baylis House, Stoke Poges Lane, Slough SL1 3PF

General Vacancies

CONVENT OF THE HOLY FAMILY LITTLEHAMPTON

GRADUATE

required in September to teach Physics to 'O' and 'A' level, with some General Science, in this Independent Girls' School (300).

No boarding duties. Full time appointment. Burnham scale.

Apply with c.v. and names of referees to:

Reverend Headmistress, Convent of the Holy Family, Norfolk Road, Littlehampton

Overseas continued



International Institute for Aerial Survey and Earth Sciences, 350 Boulevard 1945, Enschede The Netherlands. Tel. 053 - 32 03 30

ITC is concerned with international scientific education, research and consulting in aerial survey, photo-interpretation, mining and ground-water geophysics and geochemical exploration. In particular directed towards the needs of developing countries.

Applications are invited for the post of

educational technologist

who will head the Centre for the Advancement of Learning and Teaching - CALT, consisting of a small team dealing with matters of education policy advice, staff development in education, curriculum design, course evaluation and the development of teaching aids and learning packages.

It is foreseen that the appointee will work in close liaison with the Educational Development Unit (Centrum voor Didactiek en Onderzoek van Onderwijs) of the Technische Hogeschool Twente.

Candidates must be graduates, professionally qualified in educational technology, with several years experience in this field. Fluent English is a requirement. Candidates should speak Dutch or be prepared to make a major effort to master this language within a short period of taking up the position. Knowledge of French would be an advantage. Teaching experience would be a desirable additional qualification.

The salary will be in accordance with the Netherlands Governmental scales. The initial gross salary depends on experience and qualifications and will be Dfl. 4,348,- (minimum) /Dfl. 6,500,- (maximum) per month, exclusive of allowances.

Written applications and detailed curriculum vitae should be sent within 14 days after publication to the Head of the Personnel Dept. of ITC, P.O. Box 8, 7600 AA Enschede (The Netherlands). Information from third persons regarding suitable candidates will also be considered.

University of Tilburg (The Netherlands), Department of Language and Literature.

Applicants are invited for the post of:

reader/senior lecturer

in the Sociology of Literature. The newly established Department of Language and Literature in Tilburg (approx. 40 staff members) provides a degree in Language and Literature after 3 years of study, and postgraduate degrees after 1 year in a range of linguistic and literary professions.

The Department is organized in a number of research units, of which Sociology of Literature is one. The successful applicant will be expected to participate in teaching (50%), research (40%) and administration (10%). Applicants should hold a PhD in the theory of literature or preferably the Sociology of Literature, have a wide interest in literary theory and professional teaching and research experience of high quality.

university instelling voor onderwijs en onderzoek in de maatschappij en geesteswetenschappen

Acquaintance with or interest in empirical methods of research in the Sociology of Literature will be an advantage. Preference will also be given to candidates with a good knowledge of Anglo-American literature. Knowledge of Dutch is not essential on appointment, but will prove indispensable after a period of two years.

Salary, min. f 62,176,- and max. f 82,844,- per annum according to qualifications and experience.

Further particulars may be obtained from prof. dr. H. P. Verdaasdonk (010-3113662688) or prof. dr. H. Verdaasdonk (010-3113662841).

Applications should be sent by July 15th to: Katholieke Hogeschool Tilburg, Postbox 80183, 6000 LE Tilburg, The Netherlands; please quote reference number 110. Printed information providing additional information about the Department is available on request (010-3113662688).

Katholieke Hogeschool Tilburg

NEW ZEALAND CANTERBURY MUSEUM CHRISTCHURCH DIRECTOR

Applications are invited for the post of Director of the Canterbury Museum to take effect from the retirement of the present Director in February 1983.

The Museum is under the control of the Canterbury Museum Trust Board, and is administered locally by Local Authorities for collections on Antiquities, Geology, Zoology, Botany, History, the Antarctic and Sub-Antarctic regions and the Applied Arts and to carry out and coordinate related public education and research.

Salary: N.Z. \$30,000 - \$37,900

Qualifications - Honorary degree or equivalent. Proven administrative skills together with a knowledge of Museum Curatorial and related housing and maintenance of collections.

For schedule of further information telephone or write to the Director of the Canterbury Museum Trust Board, 100 Cathedral Square, Christchurch 1, New Zealand. Telephone: 03-363 7101. Applications close 31st July 1982.

South Australian College of Advanced Education

The Sturt Campus of the South Australian College of Advanced Education is situated 14km south of Adelaide, South Australia, adjoining the Flinders University and the Flinders Medical Centre. The College offers pre-service and post-experience programs in Teacher Education and the Health Professions, including Nursing, Speech Pathology and Health Studies.

Applications are invited for the position of

Head of School of Health Professions

Responsibilities

The person appointed will be responsible for academic leadership of staff, for co-ordination and development of courses within the School, and will contribute to the teaching program. He or she will work closely with other Heads of School in providing leadership for the total academic program. The Head of School is expected to foster appropriate professional and community links and contribute to the development of research and consultancy.

Qualifications Higher degree and demonstrated skills in educational program development, administration and inter-personal relationships. The Appointment

The appointment as Head of School is initially for a period of five years with the possibility of renewal. If this appointment is not renewed after five years a tenured position at senior academic level will be negotiated, subject to the normal Council guidelines on satisfactory academic performance.

The appointment will date from January 1, 1983

Salary for the Head of School is currently \$A37,071.

The College Council might be willing to negotiate a higher level of salary for a person with an established international reputation in the field of Health Professions.

Applications

Applicants should forward a curriculum vitae including details of qualifications and experience in the areas of teaching and administration, and the names and addresses of three referees.

Further particulars are available on request from:

The Secretary, Staffing and Personnel South Australian College of Advanced Education

Lorne Avenue

MAGILL, SOUTH AUSTRALIA 5072

Applications close on Friday, July 23, 1982 and should be sent to The Secretary, Staffing and Personnel.

AUSTIN HOSPITAL HEIDELBERG - VICTORIA - AUSTRALIA 3084

DIRECTOR/PROFESSOR OF PSYCHIATRY

Applications are invited for the above position from suitably qualified applicants who hold membership of the Royal Australian and New Zealand College of Psychiatrists, or its equivalent, and who have had accredited training in adult psychiatry, together with extensive clinical and teaching experience.

This post is a full-time salaried position and the appointee will be selected jointly by the Austin Hospital and the University of Melbourne. For the purpose of this appointment the Larundel Psychiatric Hospital will be affiliated with the Clinical School of the Austin Hospital. The title of the Unit will be the University of Melbourne/Larundel Psychiatric Hospital Unit of Psychiatry.

The administrative base will be at the Austin Hospital which is a 486 bed teaching hospital located in Heidelberg, eight miles from the city centre. The Larundel Hospital is a 500 bed psychiatric hospital, approximately four miles from the Austin Hospital. The University of Melbourne campus is situated close to the city centre.

The Director/Professor will have clinical duties in both hospitals, and will be responsible for teaching and research in Psychiatry. The appointee will be expected to liaise closely with the Director of Postgraduate Psychiatry Training of the Mental Health Division of the Health Commission of Victoria, and will be a member of the University of Melbourne Department of Psychiatry.

The conditions of service will be as laid down by the Hospital Remuneration Tribunal for the State of Victoria. The current salary of a Senior Specialist in Charge is \$A28,443 per annum. The appointment carries limited private practice rights. Academic status within the University of Melbourne will be as a Professorial Associate with the title of Professor. The hospital and the University reserve the right to make an appointment by invitation.

Further information may be obtained from: Dr. F. J. O'Rourke, Medical Superintendent, Austin Hospital, (03) 1450 5111, Ext. 5260. (Telex: A 52039).

Application forms and a memorandum giving further details are available on request from the General Manager, Austin Hospital, Heidelberg, Victoria, Australia, 3084. Applications will be received until 4.00 p.m. on 30th August, 1982.

KING SAUD UNIVERSITY RIYADH, SAUDI ARABIA

THEORETICAL ASTROPHYSICISTS

Vacancies exist in the College of Sciences of King Saud University for Theoretical Astrophysicists, on a one year renewable contract. Applicants should be degree holders and have done research/publications in a related field. They should also have at least five years teaching experience. Benefits include free accommodation and medical facilities, tax free salary and yearly round trip tickets for yourself and your family.

Application forms and a memorandum giving further details are available on request from the General Manager, Austin Hospital, Heidelberg, Victoria, Australia, 3084. Applications will be received until 4.00 p.m. on 30th August, 1982.

Research and Studentships

LONDON CITY OF

POLYTECHNIC DEPARTMENT OF METALLURGY AND ENGINEERING. CENTRE FOR INSURANCE RESEARCH. RESEARCH ASSISTANT. A SURVEY OF RISK AND INSURANCE TRADING TO ENGINEERING STUDENTS.

A Research Assistant is required for a one year project funded by the Geneva Association. The project is risk management and insurance economics to mechanical and electrical engineering students at the Polytechnic in London. The project involves field work in Scandinavia, Holland and Germany. Successful candidates will have had some research or teaching experience in risk management.

Salary: £5,145 p.a. (under 30) including London Allowance.

Please apply in writing giving details of your qualifications and the names and addresses of two referees to: Mr Peter Franklin, Research, City of London Polytechnic, 100 Broad Street, London, EC2M 2EJ.

BIRMINGHAM UNIVERSITY OF DEVELOPMENT PRODUCTION

RESEARCH FELLOWSHIP. SEARCH STRATEGIES AND MOVEMENTS.

Applications invited for the above research post funded by the University of Birmingham. The post is for a period of one year from September 1982. The successful candidate will be expected to have a PhD in a related field and to have had some research or teaching experience in the area of development production.

Salary: £5,145 p.a. (under 30) including London Allowance.

Further particulars from the Director of Research, Birmingham University, Edgbaston, Birmingham, B15 2TT. Applications should be sent to the Director of Research, Birmingham University, Edgbaston, Birmingham, B15 2TT. Applications should be sent to the Director of Research, Birmingham University, Edgbaston, Birmingham, B15 2TT.

EXETER UNIVERSITY OF

Centre for Arab Gulf Studies. RESEARCH FELLOWSHIP.

Applications are invited for a one year research fellowship in the Centre for Arab Gulf Studies. The fellowship is for a period of one year from September 1982. The successful candidate will be expected to have a PhD in a related field and to have had some research or teaching experience in the area of Arab Gulf Studies.

Salary: £5,145 p.a. (under 30) including London Allowance.

Further particulars from the Director of Research, Exeter University, Exeter, Devon, EX4 4JF. Applications should be sent to the Director of Research, Exeter University, Exeter, Devon, EX4 4JF.

BRUNEL UNIVERSITY

Department of Law. RESEARCH ASSISTANT.

Applications are invited for a one year research post in the Department of Law. The post is for a period of one year from September 1982. The successful candidate will be expected to have a PhD in a related field and to have had some research or teaching experience in the area of Law.

Salary: £5,145 p.a. (under 30) including London Allowance.

Further particulars from the Director of Research, Brunel University, Uxbridge, Middlesex, UB8 3PH. Applications should be sent to the Director of Research, Brunel University, Uxbridge, Middlesex, UB8 3PH.

HULL THE UNIVERSITY OF

Institute for Health Studies. RESEARCH ASSISTANT.

Applications are invited for a one year research post in the Institute for Health Studies. The post is for a period of one year from September 1982. The successful candidate will be expected to have a PhD in a related field and to have had some research or teaching experience in the area of Health Studies.

Salary: £5,145 p.a. (under 30) including London Allowance.

Overseas

Western Australian College: Mount Lawley Campus

Department of Communication and Language Studies. Senior Lecturer/Lecturer Interpreting and Translating (up to three positions).

QUALIFICATIONS: Applicants are invited from persons capable of working at advanced professional level in English and German or English and Italian. Applicants should possess native-like proficiency in both English and German or English and Italian, and be experienced in interpreting and translating and preferably also in language teaching. Possession of a recognised academic award in interpreting and translating as well as an appropriate higher degree are desirable, and essential for appointment to the Senior Lecturer level.

Appointees should be capable of gaining professional accreditation as interpreters/translators at (NAATI) Level 4 (Advanced Professional Level).

DUTIES: The appointees will be expected to work under the direction of the Head of the Department of Communication and Language Studies, and in co-ordination with other lecturers, to implement training programmes in the theory and practice of interpreting and translating. They will be expected to give advanced tuition in German or Italian and to assist in teaching in relevant areas in other courses conducted by the College. Appointment at Senior Lecturer level would imply a higher level of academic and administrative responsibility.

THE COLLEGE: Established in 1970, the Mount Lawley Campus of the Western Australian College of Advanced Education is situated approximately five kilometres from Perth city centre. Some 2000 students are enrolled at the campus studying for a range of diploma, degree and post-graduate awards.

Mount Lawley Campus of the Western Australian College of Advanced Education is the institution responsible for providing professional level tertiary courses for interpreters and translators in Western Australia, and offer a three-year full time programme in this area, leading to professional accreditation at Level 3 as defined by the National Accreditation Authority for Translators and Interpreters (NAATI). The campus is also engaged in in-service courses for practising interpreters and translators, including higher-level courses for conference interpreters.

Initially the appointments will be made on a three year basis but the level and conditions of appointment are negotiable. Appointees will be expected to take up duties between September 1982 and February 1983.

THE CURRENT SALARY RANGES ARE: Lecturer: A\$20,963 - A\$27,539; Senior Lecturer: A\$28,127 - A\$32,782

Conditions of service are substantially the same throughout all Australian tertiary institutions. Applications, together with the names and addresses of at least three referees should be forwarded to: The Director, Western Australian College of Advanced Education, Box 217 Post Office, Doubleview, Western Australia 6018 by 31st July 1982.

Applicants should include full details of professional qualifications held, of work experience and show personal data such as date of birth etc. It is anticipated that applicants who are shortlisted will be interviewed in London, late August, 1982.

Miscellaneous

Did you Know

That there is another union representing

? FE/HE ?

For more information contact THE PROFESSIONAL ASSOCIATION OF TEACHERS

99 FRIAR GATE, DERBY DE1 1EZ

Tel: 372337/8/9

Courses

THE BRITISH SCHOOL OF OSTEOPATHY PRINCIPAL: Sir Norman Lindop, M.Sc., C.Chem., FRSC, LECTURER IN ANATOMY

The person appointed would be expected to teach Anatomy up to at least 2nd MB standard (beyond in certain branches) and play a leading tutorial and co-ordinating role in the first part of the 4-year Diploma in Osteopathy course. It is the intention to make a full-time appointment from September 1982, but applications from persons of senior experience interested in part-time appointments will be considered.

Further details from The Principal, The British School of Osteopathy, 1/4 Suffolk Street, London, SW1Y 4HG.

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